

# THE AMERICAN School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION



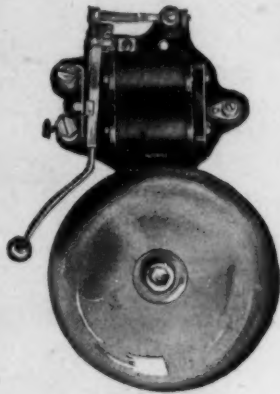
December, 1915

The Bruce Publishing Company

Milwaukee, Wis.

*"The Best Bells Money Can Buy"*

## Faraday School-House Signal Gongs



Skeleton  
2½" to 18"  
Gongs



Enclosed-Type  
Model "A"  
2½" to 18"  
Gongs



Enclosed-Type  
Model "B"  
4" to 14"  
Gongs



Enclosed-Type  
Model "C"  
5" to 12"  
Gongs



Electro-Mechanical  
Model "EM"  
6" to 18"  
Gongs

Electric Signalling in the up-to-date schoolhouse or college building is admittedly an important adjunct to the satisfactory running of school and college work.

Such being the case, it's short-sighted policy to permit an installation of Signal Gongs with or without Program Clock control to be made with the ordinary cheap wood box or iron box call-bell; this often happened because of lack of attention to specifying in black and white what type bells shall be used by the contractor.

If you'll specify that no bells except genuine "FARADAY" shall be installed, the work will seldom cost the school a penny more, and the gongs will be "THE BEST THAT MONEY CAN BUY"---that has been our slogan for years in marketing FARADAY BELLS.

The BEST type of Vibrating patterns is the Model "C" (see cut above) with full-guarded gongs; next best, the Model "B" half-guarded gong; third best, the Model "A" non-guarded gong; fourth, the open Skeleton pattern.

Electro-Mechanical Gongs (shown in right-hand cut) are chiefly used for Fire Alarm work.

You'll always be safe if you specify: "**All Gongs used throughout shall be FARADAY**"---but doubly safe if you'll specify: "**Enclosed-Type, Model A, B or C**" according to whether non-guarded gongs, half-guarded gongs or full-guarded gongs are required.

Send for Bulletin 419 on

### Electrically-Supervised Faraday Fire Alarm Systems

and we'll include pages on all FARADAY Signal Gongs shown above.

## STANLEY & PATTERSON

23 Murray Street  
27 Warren Street  
NEW YORK, U. S. A.

Los Angeles:

R. B. CLAPP, 217 West 4th St.

Chicago:

W. J. DOHERTY, 11-17 So. Desplaines St.

Seattle:

H. G. BEHNEMAN, 617 Fourth Ave.

"SWEET'S" 1915—SEE PAGES 1460 to 1467—"SWEETS" 1915



## Buying Without Regrets

The "law of compensation" is relentless.

"Nothing for Nothing" applies in every realm of effort. But the man who makes an unwise purchase buys something that—like a deficit, is less than nothing; for it requires additional outlay in later years.

## Natural Slate Blackboards

from our quarries represent the acme of economy and educational efficiency.

The best proof of the durability of our Natural Slate Blackboard in the schoolhouse, is the fact that the same rock from which they are taken furnishes the roofing slate that on the schoolhouse outlives the building.

Write for interesting booklet, "How to Judge, Specify and Install Blackboards."

It is a safeguard against unwise buying.

**Penna. Structural Slate Co.**  
Worth Bldg., Easton, Pa.

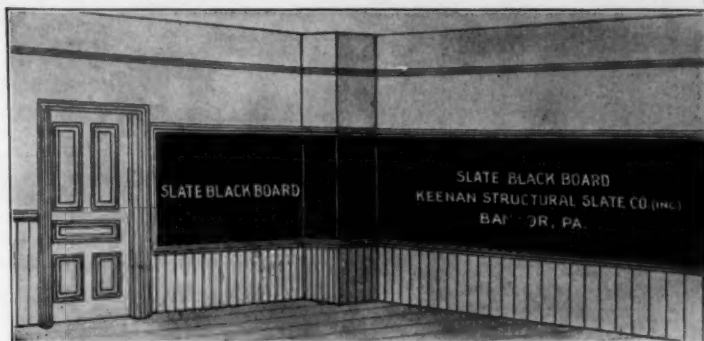
## The Bemis Standard Benches and Vises



*A Right Bench at Right Price  
Look at Vise*

CATALOG WILL INTEREST YOU

**A. L. BEMIS** 72 Commercial Street  
WORCESTER, MASS.



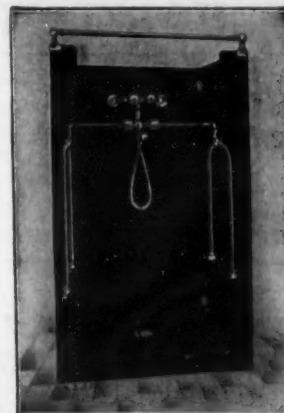
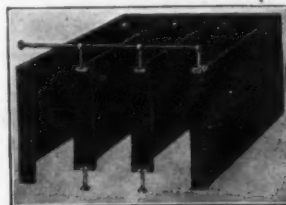
## Natural Slate Blackboards

ARE  
**Clean—Smooth—Black—Strong—Best**

Our Blackboard Booklet will tell you more about it.  
A postal card brings it to you.

### THE "KEENAN" KIND

Ventilated Urinals for Schools and Colleges our Specialty. Complete with all brass hardware for installing.



**KEENAN STRUCTURAL SLATE CO., Inc.**  
Suite A, 1st Nat'l Bank Bldg. BANGOR, PENNA.

Catalog "B" shows more types. Send for it.



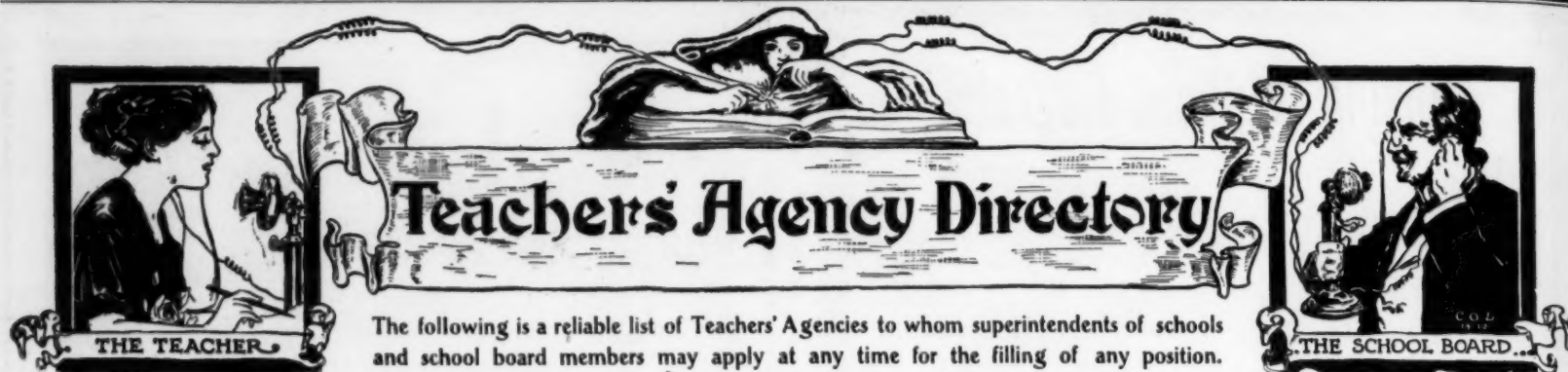
## High Grade School Furniture

**Christiansen Construction** is based upon my experience in the business covering 25 years. It is handled by trained men who have been with me for years and who build as I would if I could build each individual article myself. Every stick of wood that goes into my benches and tables is air and kiln dried. There's not the least tendency for Christiansen Construction to draw or pull apart.

Write for my catalog 22 and ask about Clincher Joined Tops.

Telephone: Seeley 3167

**C. Christiansen**  
Manufacturer  
2219 Grand Ave., Chicago



**Teachers' Agency Directory**

The following is a reliable list of Teachers' Agencies to whom superintendents of schools and school board members may apply at any time for the filling of any position.

THE TEACHER      THE SCHOOL BOARD

## The Fisk Teachers' Agency

SUITE 814-823, 28 EAST JACKSON BOULEVARD, CHICAGO  
Over 40,000 Positions Filled      32nd Year

Why employers should come to the Fisk Teachers' Agency:  
BECAUSE it has the largest membership of high grade men and women.  
BECAUSE its endeavor is to find for each position not merely some fairly suitable candidate, but the fittest candidate available. The employer wants to find the best person with the least trouble in making his search. This Agency seeks primarily to satisfy the employer rather than find a place for an unemployed candidate.

### SUPERINTENDENTS and SCHOOL BOARDS

in Wash., Cal., Tex., La., Fla., Va., N. J., N. B. Can., and in about  
TWENTY other states accepted our candidates in 1914.

"Let's get in touch" in 1915

CONTINENTAL TEACHERS' AGENCY (Inc.), Bowling Green, Ky.

## ADAMS SCHOOL and OFFICE BUREAU

364 Peoples Gas Building, CHICAGO, ILL.  
We can supply school boards and superintendents of schools with a complete line of teachers from Kindergarten to College. Requests meet prompt attention.  
J. PORTER ADAMS, Manager

**THE ONLY AGENCY THAT RECOMMENDS ONLY.** Last year we announced that thereafter we should have nothing to do with notices of vacancy; that we should inform our candidates of places only when officially asked to recommend by the school board, and then only usually a single candidate, never more than two or three. The result was the largest business in our 31 years of experience. Suppose you try us.      The School Bulletin Agency, Syracuse, N. Y.

### Southern Teachers' Agency

W. H. JONES, Mgr.      Columbia, S. C.

### Specialists Department

All Manual, Industrial, Scientific, and Cultural Arts. A splendid enrollment of Specialists. Full records presented.

### NORTHERN TEACHERS' AGENCY,

12 Roberts Street, FARGO, N. D.

The demand for good teachers at good wages in all schools is constant in this northwest. You will like to teach here. Now is the time to enroll. Write us today for blanks and literature.

W. L. STOCKWELL, President.  
State Supt. 1903-11

MRS. MATTIE M. DAVIS, Manager.  
14 years Co. Supt. Cass Co.

### The TEACHERS' EXCHANGE

OF BOSTON, 120 Boylston Street  
Recommends TEACHERS, TUTORS and SCHOOLS

**WE RECOMMEND ONLY** when asked to do so by school officials direct. FOR THREE YEARS this has been our policy. More than eleven thousand brainy men and women placed. 430% growth in business last year. We just purchased the WYATT INDUSTRIAL TEACHERS' AGENCY and are better equipped than ever to recommend TESTED AND INVESTIGATED teachers for ANY POSITION. A distinctive service for Educators by Educators.

DEPARTMENT OF EDUCATION

The Western Reference & Bond Ass'n, Inc., 699 Scarritt Bldg., Kansas City, Mo.

### SCHERMERHORN TEACHERS' AGENCY

353 Fifth Ave. NEW YORK  
Oldest and best known in U. S. Est. 1855. CHAS. W. MULFORD, Proprietor.

### Dewberry School Agency

Motto: "The Right Teacher in the Right Place."  
Twenty-two years' experience. R. A. CLAYTON, Manager, Birmingham, Alabama

School Officials in need of desirable teachers write or wire us your needs at our expense. Prompt and efficient service insured. William Ruffer, Manager

**ROCKY MT TEACHERS'**  
AGENCY, EMPIRE BLD G, DENVER, COLO.

## The Pratt Teachers' Agency

NO. 70 FIFTH AVENUE, NEW YORK

RECEIVES calls at all seasons for college and normal graduates, specialists, and other teachers in colleges, public and private schools, in all parts of the country. Advises parents about schools. WM. O. PRATT, Manager

HEADQUARTERS  
For TEACHERS of

Manual Training  
Household Economics  
Commercial Branches  
Physical Education  
School Supervisors

### The Albert Teachers' Agency

633 Wabash Ave., Chicago, Ill.

Established 27 Years  
THE OLD RELIABLE

### THE DAEDALIAN CO-OPERATIVE ASSOCIATION (TEACHERS' AGENCY)

Recommends first class teachers on direct call from officials only. We have timber for all kinds of emergency openings. Try us. It will pay you. Make us prove it.

Address: G. RAY SHARP, Sec'y-Treas., Lafayette, Indiana

### ALBANY TEACHERS' AGENCY, Inc.

81 Chapel Street ALBANY, N. Y.

PROVIDES SCHOOLS AND COLLEGES WITH COMPETENT TEACHERS. ASSISTS TEACHERS IN SECURING POSITIONS.

HARLAN P. FRENCH, Pres. and Treas.

W. W. ANDREWS, Secretary

The best way to secure a thoroughly competent Superintendent or Teacher, is to write Superintendent H. E. KRATZ, Manager of

### SCHOOL AND COLLEGE BUREAU

21 E. Van Buren St., CHICAGO

His services cost Boards of Education nothing. He has a splendid list of Superintendents and Teachers from which to select.

### THE B. F. CLARK TEACHERS' AGENCY

Chicago, 413 Steinway Hall      Lincoln, Neb., 1st Nat. Bank Bldg.      Spokane, Wash., Chamber Commerce Bldg.  
Vacancies from the University to the grades.      25th Year

WE SUPPLY EXCLUSIVELY TEACHERS OF  
MANUAL TRAINING  
DOMESTIC ECONOMY  
COMMERCIAL BRANCHES  
PHYSICAL TRAINING  
ATHLETICS

Also recommend Athletic Coaches who can teach academic subjects. The University of Wisconsin took eight of our men. More than a third of the State Universities selected our candidates.

### The Specialists' Educational Bureau

ROBERT A. GRANT, Mgr.  
WEBSTER GROVES, ST. LOUIS, MO.

### Manual Arts Bureau of America

"National Clearing House" for Industrial Teachers

Manual Training, Domestic Economy and All Kindred Subjects  
JNO. S. THORN, Mgr., 1021-22 First National Bank Bldg., Birmingham, Ala.

### HIGH SCHOOL BUILDINGS

A new book that offers hundreds of ideas and suggestions for laying out and planning a new High School. It is strictly a book of plans and illustrations, and contains one hundred and ninety-eight pages. Price, \$2.50. (Postage prepaid).

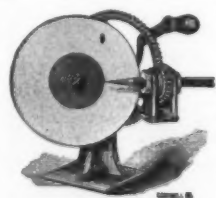
### GRADE SCHOOL BUILDINGS

Contains a large variety of plans and illustrations characterized for economy and convenience, with a careful regard for lighting, sanitation, etc. It is handsomely bound with a green cloth cover, and contains two hundred and fifty-five pages. Price \$3.50. (Postage prepaid).

### The Bruce Publishing Company

2208 Montgomery Building

MILWAUKEE, WIS.



### The GEM PENCIL SHARPENER

Sharpens Both Lead and Slate Pencils

You can point a pencil very nicely with your knife when it is sharp.

When it is not—and lead dulls it very quickly—it will break the lead.

Any machine with steel cutting edges or knives will act just the same.

That is one reason for the failure of many machines. They are not practical.

We claim that ours is practical and would like to have you try them.

Price \$3.50. Send for descriptive circular.

Manufactured by F. H. COOK & CO., Leominster, Mass.



# Slate Blackboard, Like the Rock of Gibraltar

is substantial and permanent. Slate that is used for blackboards is of the very best material, and especially selected on account of its clearness, strength, and closeness of grain.

Architects, Superintendents, and School Board members all agree that natural Slate Blackboards are unsurpassed in the school-room. They are clean in every respect, durable, have a smooth writing surface, due to the fact that they are rubbed and finished by hand. The cutting of slate is done with a circular saw, and the ends accurately finished so that the slabs will make perfect joints when placed on the wall.

Slate Blackboards are now used in thousands of schools, university and college buildings all over the country.

## Slate Blackboards

when properly installed never require repairs or replacement. There is no further expense of any kind after they are once installed, and the higher initial cost is overcome after the first few years of use. School boards who have used the plaster, composition, paper, and other artificial blackboards are familiar with the vexation and expense occasioned by resurfacing and eventually replacing such materials.

**WHEN ORDERING**, the following should be taken into consideration: That natural hand finished slate is  $\frac{1}{4}$  to  $\frac{3}{8}$ " thick. That the exact height should be specified. That spaces 5' 0" or less are of one piece, 5' 0" to 10' 0" in two pieces, and proceed likewise with larger spaces. Joints are ground straight and true, so they can be glued and fit tight. After the completion of setting, the slabs are shaved and scraped, making a uniform straight, smooth writing surface.

**MORAL:** USE SLATE FIRST, BECAUSE IT IS EVENTUALLY THE CHEAPEST.

*Write to any or all of the quarriers listed below:*

Albion Bangor Slate Co., Wind Gap, Pa.  
Crown Slate Company, Pen Argyl, Pa.  
Excelsior Slate Company, Pen Argyl, Pa.  
Granville Hahn, Walnutport, Pa.  
Jackson Bangor Slate Co., Pen Argyl, Pa.  
E. J. Johnson, 38 Park Row, New York City

Lehigh Slate Mfg. Co., Bangor, Pa.  
North Bangor Slate Co., Bangor, Pa.  
Parsons Bros. Slate Co., Pen Argyl, Pa.  
Penn. Blackboard Co., Slatington, Pa.  
Phoenix Slate Company, Wind Gap, Pa.  
M. L. Tinsman & Co., Pen Argyl, Pa.

Thomas Zellner, Slatington, Pa.



**BEAVER  
BLACK  
BOARD**

PURE WOOD FIBRE

### Put It In During Christmas Holidays

What is the need—new blackboard space or old worn out blackboards to be replaced? Whatever it is, there's no need to put up with inconvenience until summer vacation.

Beaver Blackboard can be quickly installed during the Christmas holidays. There is no delay in getting deliveries—it's sold by over 6000 dealers located all over the country. Very reasonable in cost, too, yet it's manufactured to meet all requirements—writes noiselessly and legibly, and erases clean with one sweep of the eraser.

**GUARANTEED  
FOR 10 YEARS**

Write for a sample of both black and green finish and test for yourself its writing and erasing qualities. And when you test it remember that the surface doesn't fill with chalk dust or turn gray with use. It is guaranteed to keep the original finish and color for 10 years.

Sizes:—3, 3½, 4 ft. wide; 6, 7, 8, 9, 10, 12, 14, 16 ft. long.  
Write nearest branch for prices and name of local dealer.

### The Beaver Board Companies

ADMINISTRATION OFFICES

976 Beaver Road, Buffalo, N. Y.

#### BRANCHES

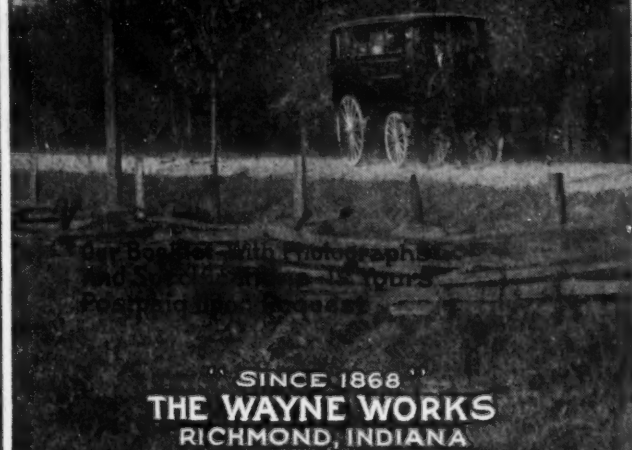
Boston—511 Old South Bldg.	Chicago—1303 Lumber Exchange.
New York—Grand Central Terminal	Minneapolis—549-550 Plymouth Bldg.
Philadelphia—1121 Land Title Bldg.	Kansas City—302 R. A. Long Bldg.
Baltimore—1033 Calvert Bldg.	Omaha—1426 W. O. W. Bldg.
Cleveland—611 Williamson Bldg.	San Francisco—520 Rialto Bldg.
Detroit—1014 Dime Bank Bldg.	Los Angeles—529 Van Nuys Bldg.
Indianapolis—522 Merchants Bank Bldg.	

## WAYNE SCHOOL CARS

THE STANDARD

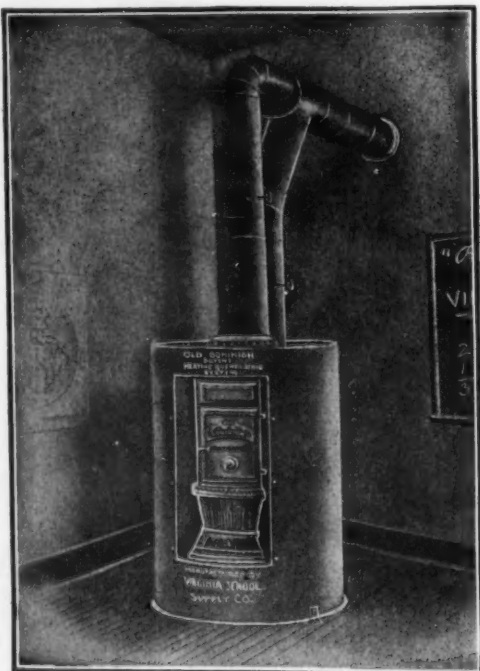
-in all styles and sizes to  
meet every requirement  
of school consolidations -

"GUARANTEE SUCCESSFUL TRANSPORTATION"



SINCE 1868  
**THE WAYNE WORKS**  
RICHMOND, INDIANA

## Old Dominion Patent Heating and Ventilating System



**Minimum Cost—  
Maximum Results**

**"The Spirit of Progress"**  
is exemplified in the Nation Wide Movement for better and more sanitary heating and ventilating of our schools, particularly in rural districts. The OLD DOMINION PATENT HEATING AND VENTILATING SYSTEM IS DAILY GROWING IN DEMAND in every State in the Union. Why?

It does not re-heat and circulate the foul air in the room.

It warms the room with pure fresh air and combines a duct or pipe to exhaust the vitiated or foul air. No other system does this.

It does not require a separate independent foul air flue of brick or metal as all other systems do.

It is simple, easy to set up, and easy to regulate. All other systems are complicated.

It does not clog with soot and rot out, requiring expensive experts to repair; other systems do.

It draws the foul or vitiated air from the floor of room by a syphon suction combined with the heater; no other system can do or does do this.

It is the cheapest of all heating and ventilating systems, because it combines heater, ventilating drum, ventilating mat, stove pipe and foul air pipe or duct. Pipe furnished free five feet from center of heater. All other systems require expensive independent foul air flues or ducts, either metal, brick or stone.

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**VIRGINIA SCHOOL SUPPLY COMPANY**

2000-2012 W. Marshall St., Richmond, Virginia

## Chemistry



SIXTEEN-DRAWER FOUR-PUPIL CHEMISTRY TABLE

## Biology



EIGHT-DRAWER FOUR-PUPIL BIOLOGY TABLE

## Laboratory Furniture

Built according to SHELDON standards of convenience and durability. Right now is the best possible time to buy this class of furniture. We can give you the most attractive quotations on both stock and special designs.

**E. H. SHELDON & CO., Muskegon, Mich.**



# You Can Have Pure Air In Your School

at all times by installing the TUEC Vacuum Cleaner. Safeguard the health of the children from the impurities contained in the dust and dirt, which is bound to be tracked into the schoolroom this time of the year.

The TUEC is known to be one of the best air purifiers, since it not only keeps the school clean, but it prevents the accumulation of all unhealthful germs, as it removes all the dirt from the cracks and corners in the schoolroom. The dirt is conveyed to a machine in the basement where it can be disposed of.

## THE TUEC STATIONARY CLEANER

is designed and constructed on the UNIT plan. This feature alone makes it simple, durable and economical in operation.

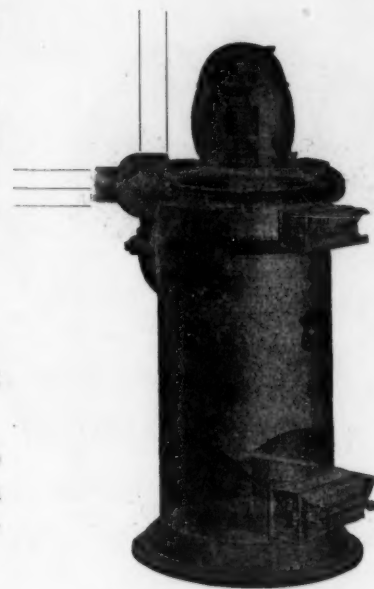
No matter how large your school building may be, it is unnecessary to install the pump system. The TUEC centrifugal fan and motor moves a larger volume of air than any other pump system can ever move, does it continuously day after day, and at a far lower cost.

**REMEMBER**—It is just as easy to equip your old school building with the TUEC Vacuum Cleaning System as it is to install in the new building.

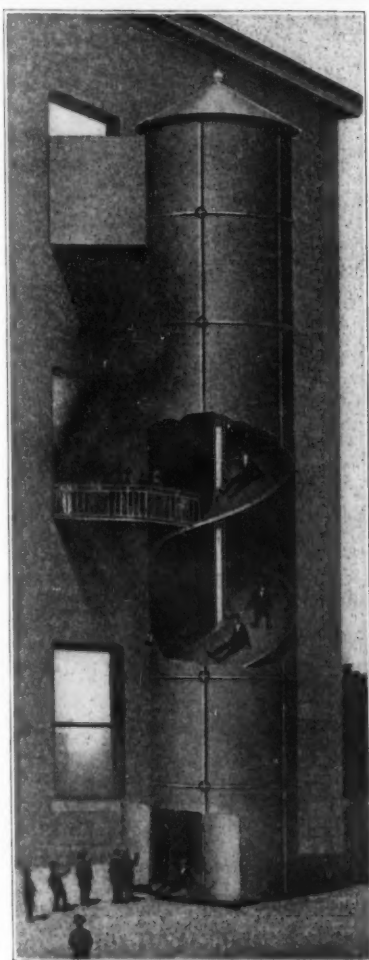
*Do not make the mistake of having the piping too small. Pipe smaller than 2½ inches should not be used. Consult our Engineering department which is always at your service—free.*

FOR CATALOGS AND INFORMATION WRITE

The United Electric Company, 7 Hurford St., Canton, Ohio



This shows the TUEC machine. The design is the same for all the TUEC systems, the size only varying according to the air capacity and number of sweepers.



By equipping your schools with the *right* kind of fire protection devices you

### AVERT DISASTER

Architects and school boards unanimously commend our

### SPIRAL FIRE ESCAPES

Constructed in either open or enclosed type—*absolutely smooth runway*—no projections to catch clothing or prevent continuous slide to safety.

If your school is not already equipped with this modern protective device *don't delay any longer*. Write today for full particulars.

**Minnesota Manufacturers' Association**  
NORTH ST. PAUL, MINNESOTA

Branch Office, 212 Machinery Hall, 549 W. Washington St., Chicago, Ill.



Indestructible  
It will bear  
any  
weight



A Sanitary Movable Chair Desk  
Steel Frame. Electrically welded.  
Large size, \$3.50.

Send for Circulars



Sanitary  
Steel  
Teachers'  
Desk



Sanitary Steel Adjustable  
School Desks

Let us make you a delivered price.



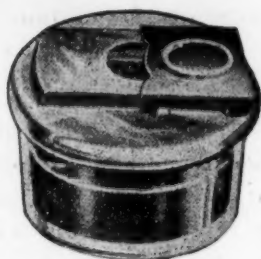
**COLUMBIA SCHOOL SUPPLY CO.**

Indianapolis, Ind.

## You Are To Be The Judge In This Case



Pat. Dec. 12, '06  
Pat. Jan. 10, '06



Pat. Nov. 14, '11

Write for our free samples, and hand down your DECISION in the way of an order. Non-evaporating, dust-proof and noiseless; no hinges to break or corks to lose.

Write for free samples today.

### U. S. INK WELL CO.

Des Moines, Iowa

## A Conscientious Architect

plans for safety as well as for comfort and convenience. He will not allow the desire for economy to swerve him from safeguarding human lives. He *knows* and will *insist* that the doors of certain classes of buildings be equipped with

### SELF-RELEASING FIRE EXIT LATCHES

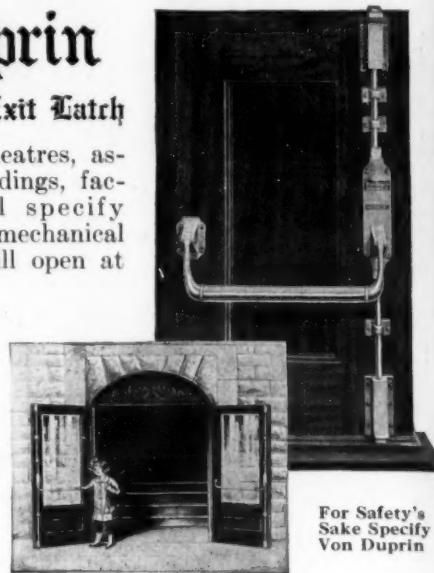
Architects who have studied and compared will invariably specify the

## Von Duprin

### Self-Releasing Fire Exit Latch

for churches, schools, theatres, assembly halls, public buildings, factories, etc. He will specify Von Duprin because of its mechanical simplicity; because it will open at the touch of a child or from the surging of a panic stricken crowd; because it is artistic in design and proof against tampering.

Send for Von Duprin catalog No. 12-C. or refer to "Sweet's Index," pages 800 to 804. Place your order through any hardware dealer.



A Lesson in "Safety First"

For Safety's Sake Specify Von Duprin

## Vonnegut Hardware Co.

GENERAL DISTRIBUTERS

120-124 East Washington St.

INDIANAPOLIS, IND.

## Subscribers' Free Service Department

We invite all our readers to ask questions of any kind on any problem of school administration, and we promise to answer them fully and promptly. If we must, we shall investigate specially, charging the trouble and expense to our editorial appropriation.

If you are interested in the purchase of any of the items listed below, or if you want catalogs for your files, do not hesitate to check this list and mail it to the address given below:

Adjustable Window Shades.....  
Agricultural Apparatus.....  
Air School Furniture.....  
Air Washers.....  
Art Supplies.....  
Athletic Field Apparatus.....  
Auditorium—Chairs.....  
    Lighting.....  
    Scenery.....  
Batteries—Storage.....  
Bells.....  
Biology Supplies.....  
Blackboards—Composition.....  
    Slate.....  
Bookbinding Supplies.....  
Bookcases—Sectional.....  
Book Covers.....  
Bronze Tablets.....  
Builders' Hardware.....  
Caps and Gowns.....  
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    Kindergarten.....  
Charts—Geographical.....  
    Color.....  
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Crayons.....  
Crayon Troughs.....  
Deafening Quilt.....  
Deodorizers.....  
Desks—Pupils.....  
    Teachers.....  
Dictionary Holders.....

Diplomas.....  
Disinfectants.....  
Display Fixtures.....  
Domestic Science Equipment.....  
    Benches.....  
    Stoves.....  
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Drawing Supplies.....  
    Tables.....  
Drinking Fountains.....  
Duplicators.....  
Dusters (Sanitary).....  
Electrical Supplies.....  
    Apparatus.....  
Erasers.....  
Eraser Cleaners.....  
Fences.....  
Filing Cabinets.....  
Fire Alarms.....  
Fire Escapes.....  
First Aid Cabinets.....  
Flags.....  
Floor Dressing.....  
Flooring.....  
Forges.....  
Fumigators.....  
Furniture.....  
    Adjustable.....  
    Movable.....  
    Steel.....  
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Heaters (Rural School).....  
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Lockers.....  
Loose-Leaf Books.....  
Manual Training Supplies.....  
    Benches.....  
Maps.....  
Metal Working Materials.....  
    Machinery.....  
Mimeographs.....  
Motion Picture Films.....  
    Machines.....  
Natural Science Apparatus.....  
Natural Science Cabinets.....  
Oil Color Materials.....  
Paints and Varnishes.....  
Paper.....  
Paper Towels.....  
Partitions.....  
Pencils.....  
Pencil Sharpeners.....  
Pens.....  
Phonographs.....  
Physical Geography Supplies.....  
Pianos.....  
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Program Clocks.....  
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Rubber Matting.....  
Rulers.....  
Safe Cabinets.....  
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Scissors.....  
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Shelving.....  
Skylight Operators.....  
Slatting Liquid.....  
Stage Equipment.....  
    Lighting.....  
    Scenery.....  
Stationery.....  
Statuary.....  
Stenciling Materials.....  
Sweeping Compounds.....  
Tables.....  
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    Kindergarten.....  
Talking Machines.....  
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Temperature Regulation.....  
Terra Cotta.....  
Toilet Paper.....  
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    Light Woodworking.....  
    Leather Work.....  
    Jewelry Work.....  
    Metal Work.....  
Typewriters.....  
Vacuum Cleaning Systems.....  
Ventilators.....  
Vises.....  
Wagons.....  
Wall Burlaps.....  
Wall Paints.....  
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# School Board Journal

Founded March 1891 by WILLIAM GEORGE BRUCE

Volume LI, Number 6

DECEMBER, 1915

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THE TEACHER—THE CONNECTING LINK BETWEEN THE ADMINISTRATIVE  
AUTHORITIES AND THE PUPILS.



# The Salaries of Superintendents of Schools

David Gibbs, Meriden, Conn.

Recently a member of a school board, who was looking for a superintendent for the schools of a city of about twenty-five thousand people, asked, "What should we pay our superintendent? Have you any figures or standards to which we may refer for definite information on this subject?" The same question was also recently discussed in a meeting of public officials in a city of more than one hundred thousand in population, and widely differing opinions were expressed.

In each of these cases the school board knew that it was not paying the superintendent as much as some other cities of about the same size and expressed the need of some approximate standard. In order to secure the data for a definite answer to the inquiries of these school boards, recourse was had to the published lists of school superintendents. Of these the "Educational Directory," published by the Bureau of Education, was selected as being most trustworthy. From it the facts and figures in the following tables were compiled.

The subject was studied from two points of view: 1. Salaries; 2. Population in relation to salaries.

## 1. Salaries and Population.

After a brief review of the salaries of superintendents for the year 1913 as given in this directory, it became evident that they fell mainly into a few groups.

Salaries below \$2,000 were omitted because a large number of the positions paying these salaries include both supervision and the principalship of grammar or high schools.

The following table shows the cities arranged according to these dominant salary groups, the average size of the cities in each group, the average salary, and the cost per capita of population of the salary of the superintendent in each group.

TABLE A. SALARIES AND POPULATION.

Salaries.	Number cities.	Av. population.	Average salary.	Cost per capita.
\$2,000-2,499.....	423	9,757	\$2,170	\$.22
2,500-2,999.....	180	16,239	2,600	.166
3,000.....	72	30,992	3,000	.096
3,001-3,499.....	25	33,173	3,268	.098
3,500-3,999.....	50	46,454	3,573	.076
4,000-4,999.....	43	85,774	4,116	.048
5,000-5,999.....	21	162,067	5,066	.031
6,000-7,999.....	9	321,937	6,400	.019
8,000-10,000.....	7	1,616,012	9,600	.005

## II. Population and Salaries.

With reference to population, the cities were arranged more or less arbitrarily into seven groups. The average population and salary of each of these groups as a whole, and of the thirds of each group, and the cost per capita of population were found. These facts are summarized in Table B.

Table A and Table B show approximately the same results. For example, according to Table A, based on salaries, the salary of \$2,500 or less than \$3,000 is paid in 180 cities having an average population of 16,239. It indicates that a city having a population of approximately 16,000 should, according to present practice,

pay its superintendent of schools approximately \$2,600.

TABLE B.—POPULATION AND SALARIES.

GROUPS.	Population Average.	Avg. size city.	Avg. Cost per salary. capita.
I.....	15,000-29,999	20,201	\$2,664 \$.127
Group I....	15,064-18,310	16,428	2,446 .15
Group II....	18,311-23,383	20,574	2,619 .122
Group III....	23,388-29,850	26,600	2,928 .11
Number of cities—156.			
II.....	30,000-49,999	36,935	3,285 .098
Group I....	30,417-33,484	31,288	3,412 .109
Group II....	34,014-39,279	38,185	2,996 .083
Group III....	39,437-47,828	43,342	3,440 .079
Number of cities—72.			
III.....	50,000-74,900	61,682	3,489 .056
Group I....	50,217-57,691	53,821	3,290 .061
Group II....	57,730-66,950	60,245	3,300 .054
Group III....	67,105-74,419	70,987	3,877 .054
Number of cities—33.			
IV.....	75,000-187,000	107,987	3,998 .035
Group I....	76,813-92,104	82,684	3,907 .037
Group II....	92,777-116,577	102,195	3,968 .038
Group III....	119,215-186,411	139,102	4,120 .029
Number of cities—40.			
V.....	188,000-499,000	293,741	5,992 .021
Number of cities—18.			
VI.....	500,000-999,000	612,501	8,000 .013
Number of cities—4.			
VII....	1,000,000-5,000,000	2,896,722	9,333 .003
Number of cities—3.			

Table B also shows that a city having a population of about 16,000 should pay its superintendent of schools \$2,400 to \$2,500. In the same way, both tables indicate that the superintendent of schools in a city of approximately 50,000 should receive a salary of \$3,200 to \$3,900.

That the salaries in Table A are higher in relation to population than in Table B is due to the inclusion in Table A of many cities much smaller in population than in the population groups of Table B. This also accounts for the large difference in the cost per capita of population of the salary of the superintendent as

indicated in the two tables. Both tables show, however, that expense per capita of the superintendent's salary is comparatively high in the smaller cities, and that if the superintendent of a city of 200,000 should be paid at the same rate per capita as one of a city of 20,000, his salary would be \$25,000.

If these averages as given in the above tables be accepted as approximate standards for present practice, the school-board member of the city of 25,000 would find that their superintendent should receive a salary of \$2,500 to \$3,000, for Table A indicates that a city having a population between 16,000 and 30,000 should pay a salary of \$2,600 to \$3,000, and Table B that cities having a population between 23,388 and 30,000 pay an average salary of \$2,928 and that the average salary of cities of 15,000 to 30,000 population is \$2,664. The salary of a city of 25,000 should fall within these averages. He would reach the same conclusion if he should figure on the basis of cost per capita, which is \$0.11 for cities of a population between 24,000 and 30,000, making a salary of \$2,750.

In the same way a definite reply could be given to the inquiries of the officials of the city of 100,000, for Table B shows that cities of 92,200 to 117,000 inhabitants pay an average salary of \$3,968, or about \$4,000, and Table A that cities with a population between 85,000 and 160,000 should pay a salary of \$4,000 to \$5,000.

It should be noted that the salary of the superintendent of schools is being increased thruout the country and the averages of the above tables based on salaries paid two years ago should be considered somewhat low at the present time.

Altho there has been no attempt to standardize the salaries of superintendents of schools, yet in cities of approximately the same population without regard to location the salaries are remarkably uniform. This is well illustrated by the following groups of cities, paying salaries of \$2,000 to \$2,500, arranged without reference to section of the country.

No. Cities	Average Population	Average Salary
93	9,682	\$2,173
94	11,581	2,219
94	9,861	2,175
97	9,607	2,131
51	9,057	2,153

The same general fact is illustrated by the salaries paid in groups of cities having a larger population. A few cities pay salaries far above the average of their population groups. One city with a population of 18,000 pays \$4,250, one of 20,000 pays \$6,000, and another of 20,500 pays \$4,225. On the other hand many cities pay salaries much below the average of their groups. Four cities, having approximately 100,000 inhabitants pay only \$3,000, while the average of this group is over \$4,000. To the school boards of these cities the above tables should be of assistance in determining and securing a more equitable and adequate salary for their chief educational official.



DR. ERNEST O. HOLLAND,  
President-Elect, Washington State College,  
Pullman, Wash.

Dr. Holland, who was formerly connected with the University of Indiana, has been superintendent of schools at Louisville since 1911. His election as head of Washington State College took place in October, after a nation-wide search among educational executives. He will leave Louisville about January first.



# School Administration in Non-Commission Governed Cities

F. E. Shapleigh, Research Secretary, Public School League of Buffalo, N. Y.

When important changes in the method of administering the school system are proposed in any large city, the question immediately arises, Are the proposed changes likely to prove desirable, in view of the experience of other large cities?

Last year the City of Buffalo faced the issue of a radical change in its form of school administration. A board of education was proposed. Citizens immediately demanded facts regarding boards of education in other cities.

A citizens' organization, The Public School League of Buffalo, met this demand by supplying facts regarding school boards in large cities thruout the country. The salient points in the administration of schools in the largest commission governed cities, compiled by the League, were summarized in the November issue of the SCHOOL BOARD JOURNAL. The present article summarizes the facts which were gathered at the same time concerning school systems in large cities which have not adopted the commission form of government.

Nine questions, identical with those sent to commission governed cities, were sent to the secretaries of the boards of education in the 24 largest non-commission governed cities. The replies have recently been published, as a companion chart to the chart on Public School Administration in Commission Governed Cities.

The questions asked were:

1. Is the board of education elected or appointed?
2. Is the board of education paid or unpaid?
3. If the members are elected, are they elected by the city at large, or by wards, or districts?
4. If they are appointed, who appoints them?
5. How is the superintendent of schools appointed?
6. Is the public school system treated as a co-ordinate department of the city government?
7. To what extent is the board of education dependent upon the central commission or council; that is to say, what control, if any, has the commission or council over the schools?
8. Who decides the amount to be annually appropriated for the schools?
9. What is the superintendent's power in regard to the selection, appointment and dismissal of teachers?

The chief facts brought out by these questions are summarized and analyzed in the following paragraphs.<sup>1</sup>

## Manner of Selecting Board of Education.

Buffalo has no board of education under its present charter. Its schools are controlled by the common council. Many of the powers usually vested in a board of education are virtually in the hands of a committee of the board of aldermen.

In seven cities, boards of education are appointed.

Sixteen boards out of the 24 are elected by those qualified to vote in school elections.

It should be particularly noted that in the three largest cities of the country the board of education is appointed. This is frequently cited as an indication that in very large cities selection by appointment is the only satisfactory method of choosing school board members. Is it also of significance that in three out of the four largest commission governed cities the members of the board of education are appointed?

<sup>1</sup>Buffalo is included in the 24 cities. The present charter expires December 31, 1915.

## Summary:

Boards appointed .....	7
New York	Pittsburgh
Chicago	San Francisco
Philadelphia	Newark
Baltimore	
Boards elected .....	16
St. Louis	Kansas City, Mo.
Boston	Seattle
Cleveland	Indianapolis
Detroit	Providence
Milwaukee	Louisville
Cincinnati	Rochester
Los Angeles	Columbus
Minneapolis	Toledo
No board .....	1
Buffalo	

## How Elected or Appointed.

The mayor appoints the board of education in five of the seven cities having appointed boards.

In the other two cities the Court of Common Pleas makes the appointments.

Of the sixteen cities having elected boards, fourteen have boards elected at large, i. e., all the voters of the city vote for each candidate. In two cities the members of the board are chosen by wards.

The proportion of appointed to elected boards is nearly the same in non-commission governed and in commission governed cities. The percentage of cities electing boards at large is also practically the same under the two different forms of municipal government.

## Summary:

Members appointed	
by mayor .....	5
New York	San Francisco
Chicago	Newark
Baltimore	
by Court of Common Pleas .....	2
Philadelphia	
Pittsburgh	
Members elected	
at large .....	14
St. Louis	Kansas City, Mo.
Boston	Seattle
Cleveland	Indianapolis
Milwaukee	Louisville
Cincinnati	Rochester
Los Angeles	Columbus
Minneapolis	Toledo
by wards .....	2
Detroit	
Providence	
No board .....	1
Buffalo	

## Is the Board Paid or Unpaid.

As in commission-governed cities, so also in non-commission governed cities most of the boards of education are unpaid. Members of four boards receive salaries. Two of these boards are in California, another is in Wisconsin and the fourth is in New York. It will be recalled that one of the three paid boards in the large commission governed cities was in California and another was also in the West.

Milwaukee pays a nominal sum of \$3 per meeting, with a limit of \$100 per year, to each member. Los Angeles pays \$10 per meeting, with a limit of \$50 per month. Rochester pays \$1,200 annually, and San Francisco \$3,000 annually to each member of the board of education. In both Rochester and San Francisco the salaries are very much larger than the merely nominal salaries paid in the three large commission governed cities that have paid boards of education. Clearly, paid boards are not in favor, especially in commission governed cities.

## Summary:

Paid board .....	4
San Francisco	Los Angeles
Milwaukee	Rochester
Unpaid board .....	19
New York	Newark
Chicago	Minneapolis
Philadelphia	Kansas City, Mo.
St. Louis	Seattle
Boston	Indianapolis
Cleveland	Providence
Baltimore	Louisville
Pittsburgh	Columbus
Detroit	Toledo
Cincinnati	
No board .....	1
Buffalo	

## Manner of Selecting Superintendent of Schools.

The superintendent of schools is elected in two cities, Buffalo and San Francisco. So far as the writer knows, these are the only cities in the country, of any size whatsoever, in which the superintendent of schools is chosen by popular election.

Hence it seems that there is little deviation among either type of municipal government, from the principle that the board of education shall have the right to choose its own executive officer. For among the 24 largest non-commission governed cities, in 22 the board chooses the superintendent; and among the 24 largest commission governed cities, in 22 the board chooses the superintendent.

## Summary:

Superintendent elected by voters .....	2
Buffalo	
San Francisco	
Superintendent appointed by board of education .....	22
New York	Newark
Chicago	Los Angeles
Philadelphia	Minneapolis
St. Louis	Kansas City, Mo.
Boston	Seattle
Cleveland	Indianapolis
Baltimore	Providence
Pittsburgh	Louisville
Detroit	Rochester
Milwaukee	Columbus
Cincinnati	Toledo

## Public School System Separate or Co-ordinate Part of City Government.

New York City describes its school system as "Practically a co-ordinate department; legally a separate department of the State."

Four cities classify their school systems as a co-ordinate part of the city government.

Three other cities claim that their school systems are almost separate.

In the remaining sixteen cities, according to the statement of the secretary of the board of education of each city, the school system is separate from the city government. Quoting several of these statements:

Chicago: School system "An arm of the State."

Philadelphia: School system "Separate department under State Code."

St. Louis: School system "An arm of the State of Missouri."

Pittsburgh: School system "Separate department operating under State Code."

Minneapolis: School system "Operates under a separate charter."

Kansas City (Mo.): School system "Absolutely separate."

Louisville: School system "Operates under a separate and distinct charter."

Columbus: "Public school system separate. Not co-ordinate with city limits."

## School Administration in the 24 Principal Non-Commission Governed Cities of the United States.

CITY AND POPULATION 1910	MANNER OF SELECTING BOARD OF EDUCATION	HOW ELECTED OR APPOINTED	IS BOARD PAID OR UNPAID	MANNER OF SELECTING SUPERINTENDENT OF SCHOOLS	IS PUBLIC SCHOOL SYSTEM A CO-ORDINATE PART OF CITY GOVERNMENT OR SEPARATE	WHAT CONTROL HAS THE MAYOR OR COUNCIL OVER THE SCHOOLS	MANNER OF DECIDING APPROPRIATIONS FOR USE OF SCHOOLS	SUPERINTENDENT'S POWER OVER APPOINTMENT AND DISMISSAL OF TEACHERS
New York 4,766,883	Appointed	By Mayor	Unpaid	Six-Year Term Board of Education Appoints	Practically a co-ordinate department; legally a separate department of the State	Mayor appoints Board; otherwise no control except over appropriations	The Board of Estimate and Apportionment provided over by the Mayor makes up the budget. The Board of Aldermen may reduce, subject to the Mayor's veto	Superintendent nominates to Board of Education from eligible list. Appointments and dismissals are wholly in the hands of the Board
Chicago 2,168,383	Appointed	By Mayor	Unpaid	Board of Education Appoints	An Arm of the State	Mayor appoints Board; Council must approve sites, buildings and bond issues	The Board of Education makes up the budget within statutory limits	Superintendent recommends to Board for appointments and must bring charges before Board for dismissal
Philadelphia 1,546,008	Appointed	By Court of Common Pleas	Unpaid	One-Year Term Board of Education Appoints	Separate department under State Code	No control	Board of Education fixes estimates and levies school tax within statutory limits	Removes
St. Louis 687,029	Elected	At Large	Unpaid	Board of Education Appoints	Separate—"An Arm of the State of Missouri"	None whatever	Board of Education makes up the budget within statutory limits	Has control of the employment and dismissal subject to the approval of the Board
Boston 670,585	Elected **	At Large	Unpaid	Six-Year Term Board of Education ** Appoints	Separate	Mayor has veto power on orders involving expenditures; veto may be overcome by 4 votes of Board which has five members	Various laws define amounts which may be appropriated	Superintendent appoints and removes subject to approval of the Board. Appointments are made in the order of merit from graded eligible lists
Cleveland 560,663	Elected	At Large	Unpaid	Board of Education Appoints	Separate	No control	The Budget Commission, composed of the County Treasurer, County Auditor, and County Prosecutor, makes up the budget within statutory limits	Superintendent submits subject to the approval of the Board, and dismissal can be only on charges approved by the Board
Baltimore 558,485	Appointed	By Mayor	Unpaid	Board of Education Appoints	Co-ordinate	Mayor appoints Board and has general supervision over all departments. Requires monthly reports	Estimates prepared by School Board subject to action of Board of Estimate. City Council may reduce but not increase	Elementary teachers appointed from graded list. Secondary school teachers appointed by Board generally upon recommendation of Superintendent. No removal until after charges preferred and trial held
Pittsburgh 333,905	Appointed	By Court of Common Pleas	Unpaid	Five-Year Term Board of Education Appoints	Separate Department operating under State Code	No control	Board of Education fixes estimates and levies school tax within statutory limits	Recommends for appointment from eligible lists
Detroit 465,766	Elected	By Wards	Unpaid	Board of Education Appoints	Practically separate	No control except over appropriations	Board of Education submits budget to the Common Council and Board of Estimate for approval	Superintendent recommends to Committee on Teachers and Schools. They in turn recommend to the Board of Education which has full power
Buffalo 435,715 Until January 1, 1915	No Board	No Board	No Board	Elected by People	Co-ordinate	Council purchases sites and orders buildings. Has power to select textbooks and course of study; in practice follows Superintendent's recommendations	The Council and Mayor fix the amount of appropriation	Superintendent's power of appointment from eligible list is absolute. Teachers can be dismissed only after hearing before Mayor
San Francisco 416,912	Appointed	By Mayor	Salary \$3,000 Per Year	Elected by People. In number of Board with vote	Co-ordinate	No control except over appropriations	The Board of Education recommends amount of annual budget to the Board of Supervisors. Statutory limits	Board of Education alone exercises all powers of this nature
Milwaukee 373,857	Elected	At Large	Paid \$1 Each Meeting Limit \$100 Per Year	Three-Year Term Board of Education Appoints	Co-ordinate	No control	The Board of School Directors makes up the budget within statutory limits	That of recommendation only
Cincinnati 363,591	Elected	At Large	Unpaid	Board of Education Appoints	Separate	No control	Board of Education submits estimates within statutory limits. Budget Commission, composed of Mayor, City Auditor and County Auditor, levy the tax	Superintendent appoints; Board confirms. Superintendent may dismiss for cause, but teacher has right of appeal to Board
Newark 347,469	Appointed	By Mayor	Unpaid	Board of Education Appoints	Separate	Mayor appoints Board; is Chairman of Board of Estimate	Board of Education makes up budget, which must be approved by the Board of Estimate, composed of the Mayor, two members of the Common Council and two members of the Board of Education	Superintendent nominates and recommends dismissals
Los Angeles 310,198	Elected	At Large	Paid \$10 Each Meeting Limit \$100 Per Month	Board of Education Appoints	Almost entirely separate	No control	State and County supply larger portion of funds. Board of Education submits estimates to County Board of Supervisors which levies school tax within statutory limits for balance	Teachers are appointed in order from eligible list. Dismissals are made on recommendation of the Superintendent and the Teachers and Schools Committee
Minneapolis 301,408	Elected	At Large	Unpaid	Board of Education Appoints	Operates under a separate Charter	No control	Budget is made by Board of Tax Levy, composed of Mayor, City Comptroller, Chairman of Ways and Means Committee and Board of County Commissioners, County Auditor and President of Board of Education and Park Board	Superintendent only makes recommendations
Kansas City 248,381	Elected	At Large	Unpaid	Board of Education Appoints	Absolutely separate	Municipal government has no control over the schools	Board of Education makes up the budget within statutory limits; where this limit precludes must be submitted to qualified voters of the District	Board of Directors has power of appointment. Board cannot dismiss during life of the yearly contract except for improper conduct. Contract may be forfeited under certain conditions
Seattle 237,164	Elected	At Large	Unpaid	Board of Education Appoints	Separate	No control	Board of Education submits estimates within statutory limits to Board of County Commissioners which levies and collects the tax	Superintendent recommends; Board approves
Indianapolis 233,650	Elected	At Large	Unpaid	Four-Year Term Board of Education Appoints	Separate	No control	Annual budget is prepared by Business Director and submitted for approval by Board of Education. Statutory limits	Superintendent has power of appointment and dismissal. A teacher has the right of appeal to the Board
Providence 224,326	Elected **	By Wards	Unpaid	Board of Education ** Appoints	No power to expend available money and to manage the school system is absolute	No control except over appropriations. Mayor is ex-officio a member of the School Board **	Board submits estimates to City Council which decides amount of appropriation	Superintendent nominates; Board elects. Superintendent has power to dismiss for cause
Louisville 223,938	Elected	At Large	Unpaid	Board of Education Appoints	Operates under a separate and distinct charter	No control	City Council must by law levy a school tax of not less than 26 cents nor more than 50 cents on each \$100 valuation	Superintendent nominates; Board may refuse to confirm. If Superintendent refuses to nominate, the only recourse of the Board would be to dismiss Superintendent, 3/4 vote necessary
Rochester 218,149	Elected	At Large	Salary \$1,500 Per Year	Board of Education Appoints	Separate	No control except in case of appropriations over statutory limit	City Charter allows minimum of \$25 for each child registered. City administration always liberal in granting appropriations above that amount	Superintendent nominates; Board confirms
Columbus 181,511	Elected	At Large	Unpaid	Board of Education Appoints	Public School System separate. Not co-ordinate with City limits	No control whatever	Board of Education makes up budget which is submitted to the Budget Commission of the County which makes tax levy within statutory limits	Superintendent appoints all teachers subject to approval of Board. Board can only appoint an "old" teacher not recommended by Superintendent by 3/4 vote of entire Board. Dismissal of teachers entirely in hands of Superintendent
Toledo 168,497	Elected	At Large	Unpaid	Board of Education Appoints	Separate Corporation wholly independent	No control	Board of Education prepares budget within statutory limits and submits same to Budget Commission	Superintendent appoints; Board confirms. Superintendent may dismiss, but teacher may demand trial before the Board

Verified June, 1915.

Toledo: "Separate corporation wholly independent."

A comparison of these facts with those descriptive of the large commission-governed cities will show that separation of schools from municipal affairs is equally common under the old form of city government and under the commission form of government.

## Summary:

School system practically co-ordinate, legally separate ..... 1

New York City.

School system co-ordinate..... 4

Baltimore

San Francisco

Buffalo

Milwaukee

School system almost separate..... 3

Detroit

Los Angeles

Providence

School system separate..... 16

Chicago

Minneapolis

Philadelphia

Kansas City (Mo.)

St. Louis

Seattle

Boston

Indianapolis

Cleveland

Louisville

Pittsburgh

Rochester

Cincinnati

Columbus

Newark

Toledo

## Control of Mayor or City Council Over Schools.

The bicameral charter of Buffalo, under which the schools now operate, gives the mayor and

common council full control over the schools.

In nine cities the mayor or council exercise partial control over school matters. This control is usually limited to appointment of the board by the mayor, or to the determination of appropriations for school purposes, as shown by the following statements:

New York City: "Mayor appoints Board; otherwise no control except over appropriations."

Chicago: "Mayor appoints Board; Council must approve sites, buildings and bond issues."

Boston: "Mayor has veto power on orders involving expenditures; veto may be overcome by four votes of Board, which has five members."



Baltimore: "Mayor appoints Board and has general supervision over all departments. Requires monthly reports."

Detroit: "No control except over appropriations."

San Francisco: "No control except over appropriations."

Newark: "Mayor appoints Board; is Chairman of Board of Estimate."

Providence: "No control except over appropriations. Mayor is ex-officio a member of the School Board."

Rochester: "No control except in case of appropriations over statutory limit."

In fourteen cities neither mayor nor council has any control over the schools.

Summary:

Complete control of schools by council and mayor ..... 1  
Buffalo

Partial control of schools by mayor or council ..... 9

New York City	San Francisco
Chicago	Newark
Boston	Providence
Baltimore	Rochester
Detroit	

No control of schools by mayor or council. 14

Philadelphia	Minneapolis
St. Louis	Kansas City (Mo.)
Cleveland	Seattle
Pittsburgh	Indianapolis
Milwaukee	Louisville
Cincinnati	Columbus
Los Angeles	Toledo

Manner of Deciding Appropriations for Use of Schools.

In three of the 24 principal non-commission governed cities, the city council decides the school appropriation. In one of the three, Louisville, the "City Council must by law levy a school tax of not less than 36 cents nor more than 50 cents on each \$100 valuation."

In nine cities, the amount of school appropriation is determined, subject to statutory limits in some instances, by a board of estimate or similar body. The composition of this board may be seen by the following extracts. These extracts also show the limitations to which some of the boards of estimate are subject, either by checks or by definite statutory limits.

New York City: "The Board of Estimate and Apportionment presided over by the Mayor makes up the Budget. The Board of Aldermen may reduce, subject to the Mayor's veto."

Cleveland: "The Budget Commission, composed of the County Treasurer, County Auditor, and County Prosecutor, makes up the budget within statutory limits."

Baltimore: "Estimates prepared by School Board subject to action of Board of Estimate. City Council may reduce but not increase."

Detroit: "Board of Education submits budget to the Common Council and Board of Estimates for approval."

Cincinnati: "Board of Education submits estimates within statutory limits. Budget Commission, composed of Mayor, City Solicitor and County Auditor, levy the tax."

Newark: "Board of Education makes up budget, which must be approved by the Board of Estimate, composed of the Mayor, two members of the Common Council and two members of the Board of Education."

Minneapolis: "Budget is made by Board of Tax Levy, composed of Mayor, City Comptroller, Chairmen of Ways and Means Committee and Board of County Commissioners, County Auditor and Presidents of Board of Education and Park Board."

Columbus: "Board of Education makes up budget which is submitted to the Budget Com-

mission of the County which makes tax levy within statutory limits."

Toledo: "Board of Education prepares budget within statutory limits and submits same to Budget Commission."

It should be noted that the amount to be spent for the schools of Cleveland is determined, not by the city but by a board consisting entirely of county officials. In several of the above cities county officials are members of the board of estimate which determines local school expenditures. Minneapolis, in particular, has a board of tax levy consisting of widely dissimilar officials.

In three Western cities the Board of Supervisors or County Commissioners determine school appropriations. As the secretaries of the boards of education in these cities have written:

San Francisco: "The Board of Education recommends the amount of annual budget to the Board of Supervisors. Statutory limits."

Los Angeles: "State and County supply large portion of funds. Board of Education submits estimates to County Board of Supervisors which levies school tax within statutory limits for balance."

Seattle: "Board of Education submits estimates within statutory limits to Board of County Commissioners which levies and collects the tax."

In Boston, "Various laws define amounts which may be appropriated."

In Rochester, the "City Charter allows minimum of \$25 for each child registered. City administration always liberal in granting appropriations above that amount."

In seven cities the board of education has full power over appropriations, subject to statutory limits.

Summary:

School appropriations decided by<sup>2</sup>

City Council ..... 3  
Buffalo  
Providence  
Louisville

Board of Estimate, or similar body. .... 9

New York City	Newark
Cleveland	Minneapolis
Baltimore	Columbus
Detroit	Toledo
Cincinnati	

Board of Supervisors or County Commissioners ..... 3

San Francisco
Los Angeles
Seattle

Laws ..... 1

Boston

City Charter ..... 1

Rochester

Board of Education. .... 7

Chicago	Milwaukee
Philadelphia	Kansas City (Mo.)
St. Louis	Indianapolis
Pittsburgh	

Superintendent's Power Over Appointment and Dismissal of Teachers.

In seven cities the board of education appoints teachers on recommendation of the superintendent. Quoting the statements from several cities:

New York City: "Superintendent nominates to Board of Education from eligible list. Appointments \* \* \* are wholly in the hands of the Board."

Baltimore: "Elementary teachers appointed from graded list. Secondary school teachers appointed by Board generally upon recommendation of Superintendent."

Detroit: "Superintendent recommends to Committee on Teachers and Schools. They in

<sup>2</sup>Within statutory limits in seventeen states.

turn recommend to the Board of Education which has full power."

Louisville: "Superintendent nominates; Board may refuse to confirm."

In Detroit, it will be noted that the Superintendent reports to a committee instead of directly to the Board of Education.

In six cities the superintendent recommends appointments, but the information received from the secretaries of the various boards of education of these cities does not explicitly state in all cases that the recommendation shall be to the board of education, nor in any of the six instances is it definitely affirmed that the board of education appoints teachers. The supposition is, however, that the board of education has appointive power, and the superintendent the power of nomination in these cities. Quoting statements from four of these cities:

Chicago: "Superintendent recommends to Board for appointments."

Philadelphia: Superintendent "recommends."

Pittsburgh: Superintendent "recommends for appointment from eligible lists."

Milwaukee: Superintendent's power is "that of recommendation only."

The superintendent appoints teachers subject to the approval of the board of education, in six cities. In one of these cities, Columbus, the board can appoint an "old" teacher not reappointed by the superintendent, by a three-fourths' vote of the entire board. The following are statements from three cities:

St. Louis: The superintendent "has control of the employment \* \* \* subject to the approval of the Board."

Boston: "Superintendent appoints \* \* \* subject to approval of the Board. Appointments are made in the order of merit from graded eligible lists."

Cleveland: "Superintendent selects subject to the approval of the Board."

In two cities the superintendent has full power to appoint teachers. In Buffalo, the "Superintendent's power of appointment from eligible list is absolute."

In two cities the board has full power to appoint teachers. But in one of these cities, San Francisco, the superintendent is a member of the board of education, and the members of the board are required by city charter to give all of their time to the work of the board.

Regarding the situation in Los Angeles, nothing further is stated than that "Teachers are appointed in order from eligible list."

Summary:

Teachers appointed

By board of education, on recommendation of superintendent. .... 7

New York City	Providence
Baltimore	Louisville
Detroit	Rochester
Seattle	

On recommendation of superintendent (appointive agency not stated). .... 6

Chicago	Milwaukee
Philadelphia	Newark
Pittsburgh	Minneapolis

By superintendent, subject to approval of board of education. .... 6

St. Louis	Cincinnati
Boston	Columbus
Cleveland	Toledo

By superintendent ..... 2

Buffalo

Indianapolis

By board of education. .... 2

San Francisco
Kansas City

Not stated ..... 1

Los Angeles



# Some Defects of Public School Administration

With a Special Study of the Relationship Between the School Committee and the Superintendent of Schools

## Part I—The Problem

Ernest W. Robinson, Webster, Mass.

### Statement of the Problem.

Our school systems are declared by capable critics to be seriously defective in point of organization, administration and productive results. One critic, Davis, has insisted on the inferiority of the organization of the elementary schools, in a bill of particulars which contains 21 counts. He sums up with the following statement:<sup>1</sup> "This is the bill of indictment. It is being examined point by point by the grand jury—the people of the land—and a true bill is being found."

Other critics object to the methods of administration. One of these, Ayres, claims that an excessive operating cost is occasioned by the great amount of retardation of pupils thruout the system, concluding with the statement that<sup>2</sup> "it is not at all likely that the people at large will be long content to support the schools as at present administered if they once fully realize that those schools are not accomplishing what we have for years assumed that they were."

W. T. Russell shows in a strong article on economy of time in education,<sup>3</sup> how the short working year, 180 days, of the American student places him at a disadvantage with the German student who has a uniform school year of 240 days, this disparity resulting in a gain for the latter of two and one-half to three years of working time in the educational period of twelve years. And, further, where 20 to 25, 45-minute periods per week constitute a normal load for the American secondary school student, his German and French confreres carry 32 to 36, and 26 to 38 periods per week respectively. . . . "The character of the work done is comprehensive, and it is pursued in a scholarly manner. With these facts in mind, there can be no doubt that foreign boys cover more ground in a thoro manner than do ours."

S. A. Courtis directs attention to the low productive capacity of the schools, in a recent article in which he asserts that educational surveys reveal one common truth, namely, that the school work done under the present methods is exceedingly inefficient. He concludes by prophesying that<sup>4</sup> "by means of systematic educational diagnosis of the causes which prevent success of individuals, and by the application of proper remedies, it will be possible for an ordinary teacher to have 75 per cent of her children growing, in place of the conventional 30 per cent!"

The 70 per cent loss of productive capacity suggested by Courtis, if it were generally demonstrable would indeed be a staggering arraignment of our vast and costly school system. Whatever loss there is, however, must be distributed over the teaching, maintenance and business departments. Poor judgment in the choice of teachers, inexpert management and wasteful methods in the physical operation of the school plant, are singled out as the most striking points whereat improvement must be made, and made at once if economy and efficiency are to be the cardinal principles of operation in the management of our schools.

Since approximately \$500,000,000 is being spent annually on the public school system of

*Note*—This article is the first installment of an important series discussing in detail, the functions and relations of school boards and superintendents. The author who was recently granted the first "superintendent's certificate" by the Massachusetts State Board of Education, is a schoolman of experience and wide knowledge in school administration. He uses Massachusetts laws as the basis for his discussions.—Editor.

this country, providing for the skilled service of 500,000 teachers, and affecting the lives of over 17,000,000 children, is it at all strange that efficiency experts and scientific managers have turned a keen and searching scrutiny on this huge operation and asked these significant questions after careful examination, survey, or investigation: "Why the excessive waste? Why the meagre output? What officials are responsible? What are the forms of administrative control?"

The last two questions indicate the eventual focal points of attack made by every examining body, individual or collective, in the last few years. The administrative control of the majority of public school systems is exercised by two sets of officials, one with legislative powers, represented usually by school boards, directors, or trustees; the other with executive authority wielded by school superintendents.

The powers and duties of school boards are as a rule quite definitely and fully set forth in statute regulations; those of the superintendent are much more briefly outlined. His executive authority is derived in part from the nature of his office as a public official, according to an opinion rendered by an eminent judicial authority, Attorney-General Knowlton, who stated that<sup>5</sup> "It was not difficult to determine that the superintendent of schools chosen by the school committee under the direction of the town or city, is also a public officer and not merely a general employe of the school committee, and in the performance of his duties he must necessarily be left largely to his own discretion."

A part also of this official's authority is explicitly set forth in the rules and regulations governing the management of the schools of his community. The obvious fitness of things many times suggests clearly his powers and line of action in the premises. A very large element of his strength as an executive official of the school board lies, however, in his relations with that board. Co-operation in spirit, and co-ordination of action on the part of both types of official, judicial and executive, represent an absolute "sine qua non" of administrative effort, whether in the field of education, industry, commerce or any other form of human endeavor in which are exercised varying degrees and kinds of authority, with a specific, constructive purpose or end in view.

To a thoughtful observer, the scattered and uncertain sources of a superintendent's power in the administration of a school system suggest many pitfalls and possible conflicts of authority in the course of his service. Part of the difficulty in the situation is due to the fact that the office of superintendent of schools is a comparatively new one. School boards, particularly in Massachusetts, are very tenacious of their traditional "rights" and are quite loth to relinquish to so-called "experts in school supervision" the smallest amount of independent authority. This is the common attitude, especially in the smaller communities. In the larger cities and towns, a more progressive spirit

is often found, whereby adequate authority for the inception and direction of important administrative measures in the management of the schools is given the executive agent of the school board.

Unfortunately the latter condition is not sufficiently prevalent to warrant the development of too much optimism for speedy improvement in this important department of school activity, for there is still too wide a variation in practice to expect even a small degree of standard attitude and action to be developed on this point. Recent writers say in this regard,<sup>6</sup> "It cannot be said as yet that there has been in any large number of towns and cities, a clear separation of legislative and executive functions. While this step has been taken in some cities, in the larger number of instances we find boards of education not only legislating, but still undertaking thru committees or individuals, to manage much of the business connected with the schools, both educational and material. In other words, we find thruout the country every possible grade of power and opportunity granted to the superintendent."

The foregoing discussion has isolated from the general administrative field two factors for later careful examination for "trouble points" in school administration, that is, confusion of functions by school boards and the poorly defined status of the superintendent of schools as an executive official.

A third factor which contributes in no small degree to possibilities of material and educational loss, is the often lax and unbusinesslike methods of school management by both school committeemen and school superintendents, due in part to the fact that neither set of officials secured their positions as a result of producing any evidence that they possessed even fair business ability. Politics and pedagogy are not closely associated in the common mind with practical business ability and the power of expending public money economically and wisely.

Much literature has been produced bearing on this department of school administration alone, with the common stress placed on the strong necessity of better business methods if we are to be able to face the great administrative problems which are now very imminent. One writer has put this point very concisely:<sup>7</sup> "Evidence shows that administrative officers have not yet demanded and obtained knowledge sufficient to enable their school systems to work at anything like high efficiency. The amount of money spent by municipalities for education is increasing much more rapidly than the population. The financial requirements of education are today greater than those of any other service performed by the community. Expenditures for training children cannot continue to increase in the future as they have increased in the past. . . . Some time, administration of education without regard to costs will be sufficient evidence of inefficiency of administrative officers."

The chief elements of our problem are now easily assembled, and a clear line of attack suggested by the foregoing discussion. It seems evident

First, That general unrest and dissatisfaction with the results of our school system as a whole is prevalent.

"Administration of Public Education in the United States," Dutton and Snedden, P. 230.

"School Costs and School Accounting," Chapter 11, P. 5; J. H. Hutchinson.

<sup>1</sup>"High School Education," Johnston and others; chapter IV, P. 74.

<sup>2</sup>"Laggards in Our Schools," Leonard P. Ayres; chapter XX, P. 218.

<sup>3</sup>"Economy of Time in Secondary Education," Educational Review; Jan., 1915.

<sup>4</sup>"Educational Diagnosis," Educational Administration and Supervision; Feb., 1915.

<sup>5</sup>In re McKenna v. Kimball, 145 Mass. 555, 556; Mr. Justice William Allen.



Second, That very specific and concrete criticisms have indicated the necessity and close imminence of a thoro reorganization of our school system.

Third, That this difficult and dangerous task will devolve primarily upon certain officials in every system, committeemen and superintendents.

Fourth, That success in any system is conditioned by the exercise or absence of harmonious working relations between these officials.

Fifth, There is sufficient evidence to indicate at present very unsatisfactory relations operating between many school boards and their superintendents of schools, due largely to confusion of functions by the former, and the uncertain official status of the latter.

Sixth, It is generally assumed that the educational department of any community, besides being its most expensive utility, is also its least efficiently managed one, a belief due in part to the absence of any proven business ability of either committeemen or superintendents at the time of their election or appointment, and in part to the often proven inability of both to spend what money is allowed them, wisely, or to keep within the annual appropriation called for by them.

It would seem then, from the above mentioned conditions, or "bill of particulars," that the most profitable method of examining the problem of the effect of the relationship between the school committee and the superintendent of schools upon educational efficiency, lies in a brief examination of expert and lay criticism of present school management; a careful study of the functions of the school board as interpreted by standard educational authorities; an examination into the status of the superintendent; an investigation of the common charges of business inefficiency made against school officials, and a careful study made of the influence of frictional relations upon general educational progress. Certain administrative norms from recognized authorities will be sought. Examples taken largely from a fairly long supervisory experience will be brought in to stress points of principle as they appear, and furnish a basis for certain remedial conclusions to be offered at the close of the argument.

Experience has given form and force to these conclusions, and developed a certain administrative philosophy for the writer, which seems sufficiently practical to consider it as an aid, even tho slight, to other workers in the field of educational administration.

#### DISCUSSION OF THE PROBLEM.

##### The Spirit of Unrest.

When Polonius asked the Prince of Denmark, "What do you read, my lord?" Hamlet replied, "Words, words, words!" The student of educational administration today could return a like answer, if so questioned, and add that his "words" contained in a large degree a spirit of counsel and warning, with pointed suggestions of impending changes of importance in the educational world.

Unrest, survey, reorganization, readjustment, economy, efficiency—here are six words which are giving pause to careful administrators, who have begun to institute productive measurements of their school systems, to plan changes with corresponding estimates of expense, to formulate large policies which will make more close the articulation between what the world demands and what the school's provide, and regain public faith in the efficiency of our school systems.

These six words do not stand for academic niceties about which gentle discussion can lightly spin; they are terms of definite action, titles of dynamic forces which already have

attained a form and momentum when properly organized and directed, that promise to bring about at least one resultant—educational revolution. Summarizing a discussion of conditions, one recognized authority on things educational insists—"Our school system is yet in the gristle, and little of its history can be written because the best of it has not yet been made. . . . It is in crying need of thoroughgoing inspection and overhauling by experts, such as commercial, manufacturing and other concerns are now everywhere employing to point out how wastage can be avoided, and greater efficiency secured. We need nothing less than a great educational revival; I believe it has already begun, and that a greater transformation than we have ever had, impends."

There is little of the "dolce far niente" spirit in such a vigorous expression of conditions and needs, and alert educators realize today that the simple choice is presented to them of recognizing and directing these new forces into constructive channels, or of being overborne and submerged by them. The Chinese have a proverb to the effect that "He who mounts a tiger must thereupon proceed apace." In the days to come doubtless many of us could wish for bridle and stirrups at the outset of such a journey, but in any event, we must make a start and learn the rules of the road, as well as our final destination while on the move.

The changes which seem to impend in the educational world are in essence an evolutionary process, tho they may assume an apparently revolutionary form, because of their brief period of development from the old placid period of conventional aims and methods to the present type of educational procedure, surcharged as it is with power for accomplishment, and guided as it is to a helpful degree by aims that are becoming daily clearer, and methods that are growing daily surer, two pre-requisites for real efficiency.

Of the six words which were mentioned as characteristic of the present spirit in education, two claim our special attention because they seem to bear major causal relations to this current spirit of change, the words, "efficiency" and "survey." The first sprang direct from the nation-wide movement a decade ago, for the conservation of our natural resources, and its active force was eventually transferred, as Munsterberg puts it, "to that limitless waste of human material, a waste going on everywhere, but nowhere more widely than in the United States."

Efficiency in its simplest, yet most complete form, means the perfect co-operation of forces working to the same end. Efficient management will mean for educational organization and administration the initiation of some very radical changes, and the facing of some difficult problems of reorganization and readjustment. These are bound to entail some very delicate forms of experimentation, with a consequent uncertainty as to successful outcome, and an inevitable certainty of greatly increased expenditures for public education.

The second term, "survey," bears a causal relation to efficiency as a process to a purpose. This movement promises to leave a permanent and distinctive mark upon our systems of edu-

cation, and in the belief of one representative student of education,<sup>10</sup> "is of such a character as to entitle it to careful consideration by students of education and by practitioners in schools as well as by the citizenship of communities. . . . A detached and dispassionate judgment of the situation will recognize in this scrutinizing movement not merely the motion of a distinct popular unrest in education; but the more significant, definite effort to make this unrest conscious, rational, and purposeful; to make criticism run within channels to give it force. . . . The survey is concerned first of all, with schools as institutions serving a definite public purpose."

In this larger purpose the spirit of the survey must be differentiated from that which commonly animated the numerous "inquiries, examinations, investigations, etc.," of various public institutions, in which individuals are usually sought out for exposure, from motives that would not bear too keen scrutiny. The root idea of the survey, while critical takes, when well conducted, a scholarly and dignified form, such as the first survey made in this country—the Pittsburgh social and industrial survey—or those typical ones made by Professors Hanus of Harvard and Moore of Yale, in the cities of Montclair and East Orange, N. J., respectively, four years ago.

Dr. Leonard Ayres expresses clearly their spirit in his summing up of these pioneer efforts toward educational reform, saying that<sup>11</sup> "the object of these surveys was to tell the people in simple terms all the salient facts about their public schools, and to rely upon the common sense, the common insight, and the common purpose of the people, as the first great resource in working out their problem. The purpose of the survey was to educate the public." And such education is not at all beside the point.

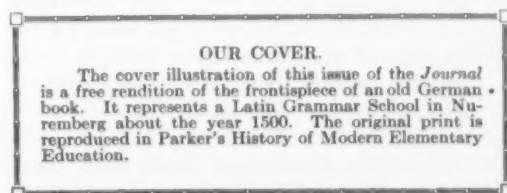
##### Public Criticism.

In a fine passage on "Our faith in education," Professor Hanus has crystallized this idea of the necessity and value of public criticism:<sup>12</sup>

"The conservation and improvement of any institution of society will always depend on the repetition of searching inquiry into its significance for contemporary usefulness. Such inquiry into . . . every phase of community life must be perpetually renewed: First to acquaint each generation with the scope and quality of its resources; and second to promote the appreciation and further development of what is good, the abolition, modification and improvement of what is obsolete or unsatisfactory, and to insure appropriate provision for new needs as they appear."

Much critical literature has been written by eminent educational authorities within the last decade, which shows their awareness of defective conditions in the management of our schools, and contains many suggestions, radical as well as sensible, for the betterment of these conditions. There can be no doubt of the corrective value of expert criticism of the type available now for administrative officials and students of school management, from the challenging thrusts of Dr. Hall to the constructive plans of Dr. Hanus. Unfortunately, many school officials are apt to consider such warnings as too Cassandra-like for serious consideration, and are equally liable to run into an aroused and informed public sentiment which brings about desired changes in a manner more effective of results than considerate of per-

<sup>10</sup>G. Stanley Hall: "Educational Problems," Vol. 1, Page XI.  
<sup>11</sup>"Psychology and Industrial Efficiency," Chap. V, Page 38.



<sup>10</sup>Edward C. Elliott, "State School Surveys," American School Board Journal, March, 1914.

<sup>11</sup>"School Surveys," "Journal of Education," June 3, 1915.

<sup>12</sup>"A Modern School," Chap. VI, Page 155.



sional feelings or professional traditions. This occurs, however, in the more conspicuous cases of administrative apathy only, when patience in an enlightened community can no longer be a virtue. Officials usually deserve all the criticism and discredit put upon them in such circumstances.

But there is a type of public criticism offered by those deeply interested in the work and results of the schools, but unskilled in the technique of administration, which is for school officials of real value, the criticism of the sober-thinking, intelligent body of citizenship in every community, whose members are taxed heavily but willingly for the support of public education, but who feel that the returns to society, whether cultural, commercial or industrial, are not commensurate with the expenditure of money by the community, or of time by the pupils in the schools. These are valid questionings.

An interesting inquiry into the opinion of this great class of loyal supporters of the public school system was recently made by a prominent educator in the western part of the country.<sup>12</sup> Because the secondary school organization and methods are of great interest in every community, the principal question was—"In your judgment, what is the greatest weakness in our public high school as at present organized and conducted?" Out of 110 inquiries sent out, 82 answers were received. A few characteristic ones are here given:

The high school does not fit boys and girls to earn a living.

The work is theoretical, visionary and impractical.

Not sufficient emphasis is placed on the common branches.

Not teaching to do things.

Not teaching the proper care of public property and respect for older people.

Not teaching the pupil how to study.

Waste of time and effort.

Too little attention given to the vocational.

An inexcusable weakness is the gap between the grades and the high school.

Why not let the high school follow the grades naturally, instead of hooking on to the college and leaving its feet dangling in the air as at present?

All of the above criticisms are interesting and many of them touch upon basic weaknesses in our present educational scheme. Educators had pointed out long before, the really vital ones and had urged remedial action time and again. But when defects can be seen so clearly and expressed so pithily by the layman, moderate-moving administrators realize that action may soon follow upon counsel, and that it might be well to forestall such action by showing some intelligent initiative themselves along the lines so plainly indicated to them by public sentiment.

There are two other well-defined types of critics in every community, the "grouch-holders" and the self-seekers, both of whom seek out school officials or unusual conditions rather than genuine administrative deficiencies as targets for their slings. The chronic fault-finder who centers his attacks upon the institutional activities of any community in season and out, is not an uncommon sort of human gad-fly. The school system has to bear its buzzing, and sometimes receives an unexpected sting. Such malcontents are more irritating than important to the civic life, representing idiosyncracies rather than ideals. The second class is a far more numerous and dangerous one for any superintendent or board to have to cope with. It is composed of politicians who oppose the school

<sup>12</sup>J. W. Crabtree; "Criticisms of the Public Schools by the Laity, N. E. A. Proc.," '10, P. 104.



A PLAYGROUND ORNAMENT.

The beautification of school playgrounds by means of shrubbery, flowers and sculpture, is one of the unused opportunities for the esthetic education of American children. A suggestive group for a school fountain, modeled by Mr. Frank L. Ingels, of Chicago, is illustrated above.

administration for a variety of reasons, and other self-seekers who wish to secure some particular advantage, or revenge themselves for some fancied grievance. The menace of their attack lies in its subtlety. Assuming the form, and simulating the zeal of real public-spiritedness, these permanent foes to any institutional activity which cuts athwart their special ends or desires, often skilfully arouse formidable opposition in every community.

The best way to meet this type of public school criticism is to isolate the individual critics and their issues, often a very difficult thing to do, force them out into the open, and then give them vigorous and relentless battle, aided by the forceful, real friends of education, until they are completely defeated and "shown up" or until they have won the contest themselves. A superintendent is not long in any community before he is challenged directly or indirectly by these "champions of the plain people." His surest defense is a determined offense, which is in fact the only defense against their wiliness and positional strength in the community. The war is never ended, but each victorious battle helps the morrow.

Such opponents serve a definite purpose however, to the administrative force of any public institution. They often uncover some condition or method of operation which does need official attention. They serve to keep officials on the alert for structural or operative weaknesses in their fields of work. Since they are inescapable, they must be endured, watched and controlled!

There is another common type of public school criticism, which is usually more violent than important, that of the daily press and monthly magazines and women's home journals. Their intermittent "Playing up" of some promising situation or condition which can be made to appear very suspicious to a fast-reading and rather gullible public, brings at times its embarrassments and troubles to school officials. But the "ultimate sanity of things" invariably operates to restore correct perspectives for every derangement of plan or purpose brought about by sensation-seekers, circulation managers, or innocent and earnest, but poorly-informed apostles of reform. Out of their motives, worthy or unworthy, little permanent harm can come, while there is positive good at times to be

gained by "letting in the light," even tho it is flashed from a dark lantern.

#### Business Inefficiency.

The most serious criticism directed against school officials by the forceful part of the community is that which accuses them of the poorest business sense and management on the material side of education. The gravity of such criticism is evident when it is realized that the educative process is not merely a grouping of a few discrete elements, buildings, pupils, curricula, textbooks and instructors impinging on each other mechanically. Its best realization is attained as a result of brainy and purposeful planning by administrative officials who must combine these elements and motivate them into an active, efficient educational operation, "a going concern," as the business world would term the process. To do this well at the present day means a large expenditure of money. In the future it is going to mean much more.

The public pays the bills and rightfully asks for a complete accounting. It is suspicious of a rapidly mounting annual cost of education, coupled with apparently the same material equipment each year, and a slower increase of school population. As one student of school finances and operation well says,<sup>14</sup> "Along with this great increase in expenditure, and with the demand for still greater sums of money for public education, there has arisen the necessity for greater ability in the handling of school moneys, and, on the part of the taxpayers who furnish the money, a desire to know how the money is spent and what results are obtained."

The quick of public interest in education is touched instantly when inquiry penetrates to the question of results and costs. Faults of mechanical organization of the various elements of teachers, teaching, grading, curriculum have for the average citizen but passing interest. The amount of money expended, no matter in what department, what it buys, and who conducts the business, these are the sensitive areas in the mind and feeling of every typical American community. European countries call us "Money-minded."

If school committeemen are not good men of business, the community is itself to blame, since the determining and corrective agency for good government—the ballot—lies in its own hands to operate. The superintendent of schools may often have been appointed after keen competition, not for his business qualifications, but on account of agreeable personality, good presence, local influence, or clever "inside work" by the ubiquitous political toiler. One other important reason why many superintendents are not good men of business, is that their boards reserve to themselves the financial and material management of the schools, relegating to their executive the purely supervisory and pedagogical work of the school system. There are, on the other hand, superintendents of outstanding ability as businessmen, whose native force and ability command the respect and gain the co-operation and support of the best men of business in many a city and town.

"G. D. Strayer; "City School Expenditures," Page 5.

(To be continued in January)

Muskogee, Okla. Supt. E. S. Monroe has issued special bulletins in the schools, giving directions for the teaching of spelling, writing and arithmetic. The work is intended to make for the better preparation of pupils and for more efficient work after leaving school.

The basis of the work in spelling is the "thousand commonest words" prepared by the Russell Sage Foundation. In the same manner, by carefully graded drill exercises, the children will be given a thoro foundation in the fundamentals of arithmetic. Teachers have been given lists of exercises suitable to the respective grades and will be held responsible for the results. "Special drills have been included for slow or backward pupils.



# A Hyphenated Official—The Secretary-Business Manager

Egbert Close, Asbury Park, N. J.

Much has been written concerning the qualities necessary in one who would be a good teacher or superintendent, and now and then our attention has been called by educational journals to the ideal Board of Education member.

But aside from brief mention, to the effect that the business executive is slowly coming into his own, little has been printed that would tend to give an idea of the qualifications a Board should look for when engaging the latest outgrowth of such executive, viz., the Secretary-Business Manager.

This hyphenated official is to be found not only in systems of medium size, but larger cities have adopted the plan of making one person responsible for the secretarial work and business administration of their schools.

Time was when the Superintendent of Schools, thru tradition, considered it his duty to keep each detail of scholastic and business administration directly "under his thumb," as it were. This was not the result of his own belief, altogether, but came about as a consequence of double duties thrust upon him and of dual capacities being required of him.

A gradual awakening on the part of school boards, and a long standing conviction on the part of the superintendents, eventually effected a readjustment of things so that the teaching expert was granted a partial divorce from the tedious detail of business by the introduction into school affairs of a separate business executive, able to relieve the educational expert of many things which had formerly interfered with the fullest supervision of matters purely scholastic in their nature and by far the most important part of school work.

It is this hyphenated official, of comparatively recent advent, with whom this article is concerned.

Unless one has grown up with the business and has learned it at first hand, thru employment as a clerk or assistant secretary, he will find it extremely difficult to fit at once into the niche to which he is appointed.

For it is indeed a formidable list of qualifications which occurs to the writer when he considers himself in the place of a Board member, about to cast his vote for a candidate who hankers after the title of S.-B. M.

## His Duties.

First of all, let us consider the scope of his duties as laid down by the School Law of New Jersey, and which, after all, indicate only slightly what the real work of a combination Secretary and Business Manager is:

"The Secretary shall record the proceedings of the board and of its committees, and shall be the custodian of all securities, documents, title papers, books of record and other papers belonging to the board under such conditions as said board shall prescribe.

"The Secretary shall collect tuition fees and other moneys due to the board of education, etc.  
\* \* \*

"He shall be the general accountant of the board of education and shall preserve in his office all accounts, vouchers and contracts relating to the public schools. He shall examine and audit all accounts and demands against said board.

"All disbursements of the board of education shall be by warrant drawn on the custodian of the school moneys of the district, signed by the president and countersigned by the secretary.

"The Secretary shall report monthly to the board of education the amount for which warrants shall have been drawn during the preceding month, the accounts against which said war-

rants shall have been drawn and the balance to the credit of each account, and shall, at the close of the fiscal year, make a full itemized report of the finances of the school district.

"The Secretary of the Board of Education shall be the Secretary of the Board of School Estimate, but shall receive no compensation as such."

So far as the law is concerned, the above would indicate that the labors of a Secretary are not arduous. The indication is erroneous.

Following is what the law prescribes as the duties of a Business Manager:

"The business manager shall have a seat in said board and the right to speak on all matters relating to his department, but shall not have the right to vote.

"He shall have charge and care of the public school buildings and all other property belonging to the school district.

"All plans and specifications for the erection, improvement or repair of public schoolhouses shall be drawn by or under the supervision of the business manager, if there be one, and shall be approved by the Board of Education. Said business manager shall supervise the construction and repair of all school buildings and shall report monthly, etc. \* \* \* He shall superintend all advertisements for bids and the letting of all contracts. He shall inspect all work done and materials or supplies furnished under contract, and shall, subject to the approval of the Board of Education, condemn any work or reject any materials or supplies, which, in his judgment, do not conform to the specifications contained in the contract therefor, and shall perform such other duties as may be required by the Board of Education."

## The Legal Responsibility.

From the foregoing, it is evident that this Secretary-Business Manager must be familiar with business in its varying phases. He should be more or less cognizant of the "ins" and "outs" of the stationery trade and publishing business; he should be familiar with the more important intricacies of the real estate and insurance profession; he should know how a complicated heating and ventilating system may be most economically operated. Inasmuch as a turn to the right or to the left without consulting some mysterious code of School Law might result in disaster, he ought to be somewhat of a lawyer, not only to the extent of a thoro knowledge of the school laws of his state, but also as regards a knowledge of legal instruments and usages. A joker in a contract might cause his Board untold embarrassment and while City Solicitors often act as legal advisers to Boards of Education, their service is more or less perfunctory. It is upon the Business Manager that the Board relies and his is the responsibility for all that is important in a business way.

Our hyphenated gentleman, to measure up to his job, must be an accountant, expert in his particular line. He must realize the full import of mere figures, and should be able to call attention to causes and results which they indicate, but which are apt to be overlooked by busy Board members. His work makes him analytical and he is the one best equipped to get at the bottom of matters, because of his daily intimacy with the hundred and one things which are going on in his office.

## Correspondence and Accurate Records.

This official must be fairly well educated and should be a good correspondent, lest he bring his employers into disrepute thru loosely assembled and ambiguous phrases. Boards of Education are apt to be judged by the kind of

correspondence which goes out on their letter-heads and for this reason alone an educational corporation cannot afford to employ an illiterate wielder of words.

To help toward his success as a real Secretary, the candidate should possess a working knowledge of shorthand. Many a resolution or motion will be dictated at a speed too great for the writer of longhand. The importance of recording motions just as they are put cannot be overestimated, and it is here that his knowledge of stenography will mean much to the Secretary. As he is an historian, he must note his history of proceedings in a manner which is at once absolutely correct and unquestionable. The importance of this is often demonstrated when Boards of Education become involved in legal entanglements or when a prospective customer orders his broker to pry diligently into the preliminaries of the Board which lead up to the issuance of school bonds. One error in the record of proceedings may be held to invalidate an entire issue and the bond houses are warranted in making a most careful scrutiny of the minutes before purchasing.

Along with his ability as an accountant and correspondent might be mentioned the Secretary's ability to collect outstanding accounts. Knowing how to get that \$800 from the Blankville School Board, for tuition of their pupils, on the day it falls due, is a valuable asset rendered more valuable when done in an inoffensive manner.

## Accuracy and Memory.

As a walking encyclopedia, the man of whom we are writing should be somewhat of a marvel. With a memory at once accurate and retentive, he should strive to give, simultaneously with the question, the right answer as to things that may have happened seven, eight or ten years back. He must know, without thumbing over numerous pages, the price paid for floor oil in 1905, the cost of pea coal during the first year that School Number Two was operated, etc., ad infinitum. This is one of the secrets of success, if the Business Manager would be successful. Cultivate a memory for all things and make it a point to remember each detail likely to be asked about for years to come. "I don't know" or "I guess" do not appeal strongly to practical businessmen who wish to ascertain something without waiting very long for the right answer.

An understanding of building and repairing is altogether essential. The law, as quoted above, requires that this all-around businessman shall recommend payment for repairs and the like only when he shall have approved of them and knows that they are properly done. More than a sprinkling of practicality, then, is necessary.

All of these things that we have hinted at only indicate the mechanical make-up of the man who should be appointed to a position such as that under discussion.

Looking at the candidate from a different point of view, we might well ask these questions:

Is he honest? Conscientious? Capable? Is he a man of sound judgment?

## Paramount Qualities.

Does he know the meaning of that little word *tact*? Would he act diplomatically when necessity demanded that he stay on the fence, say—during a split between factions in his Board? Would he be able to deal directly and indirectly with scores of different people during the year, and could he cope properly with them, according to the varying characteristics, personality and disposition of each?



Putting it the other way about, we would say that one who seeks to be the possessor of a combination title must embody all of these traits which we have listed. Having the direct control of the disbursement of thousands of dollars (under the authorization of his superiors of course), honesty is a paramount qualification. The responsibility for payrolls, purchases, etc., really devolves upon him, as he is the one person who knows whether services have been rendered and whether goods have been received.

As an official dependent upon other things than the caprices of friendly politicians, the real Business Manager would not last a week if he were not conscientious and wrapped up in his work sufficiently to demonstrate his interest in it to others.

An incapable or incompetent man, placed in such a position, might work untold harm and mischief unless his superiors knew of his incapacity and exercised a watchful eye over everything he did. That would be next to impossible and the only thing left for them would be the bestowal of the G. B. upon the Business Manager.

#### Tact and Again Tact.

Tact! That might mean agreeing with everyone you meet, irrespective of what your own opinions and convictions are. Sometimes it is necessary, even at the risk of getting a name for having no mind of your own. For it pays, in tight places, to have no opinion. Imagine a whole Board and even a whole community divided on some vital question of grave concern to the school system. Imagine further that their contentions resolve the whole affair into an unfortunate feud. The only way the man who occupies the chair of the business executive can survive is by the use of tact. Having no outspoken opinion of his own, he can readily agree with all and can listen from nine to ten-thirty while one grievous member pours out his story and send that individual on his way rejoicing just as the other fellow, whose contention is quite the reverse, comes in to recount his tale of woe, and leaves with the same feeling of relief.

Or again, the man at the desk may be called upon by an unscrupulous typewriter agent who wants to sell a new machine against a short appropriation and bill it as "repairs." By showing that unworthy the handwriting on the wall and the aperture left in it by the carpenter, the official gives his tact a little more exercise, especially if the villain is ejected without broken bones.

Take it another way: Our dear book agent friend from Blank's is an estimable gentleman, who works over-vigorously for his firm. He desires to do some "pumping" in an effort to discover who the new Superintendent will be and begins by handing out a couple of Blank's good cigars. By all means, the aspiring appointee should accept them and talk with the "tactful" representative for an hour, if necessary, but should send him away knowing no more than when he came. Taking the cigars does not require tact, but retaining the representative as a friend, after telling him in the deaf and dumb language that what he seeks to learn is as yet none of his business, calls for a goodly portion of tact.

For many reasons, therefore, the Secretary-Business Manager should be a man of tact.

#### The Spirit of Progress.

Neither can this official afford to sit still and let the grass grow beneath his feet. He must be a reader and as much of a constructive thinker as possible. He must know how to plan and above all he should be open-minded to the extent of thirsting after a knowledge as to how the other fellow carries on his Board's business.

Having no real "boss" directly at his elbow, he must plan for himself, following the policies of his Board of Education, whom he meets perhaps once or twice a month.

The continual interchange of ideas between Business Managers is a source of enlightenment to all who realize that the other man may be doing a particular piece of work in a better fashion than his contemporary. The willingness of business executives in the largest school systems to give, in response to inquiries, an exhaustive and detailed explanation of some scheme or system they are following, is gratifying to the man who seeks to better the efficiency of his own office. A notable thing is the fact that these busy and successful officers are themselves eager to know how the small districts operate and many improvements result from this mutual exchange of opinions and ideas.

As a matter of fact, then, the Secretary-Business Manager is engaged in a line of work that is by no means unimportant. He is in reality an officer of a corporation which, in the ordinary city system, expends from a hundred thousand to two hundred thousand dollars of the taxpayers' money each year. In six or seven years' time his office will have handled the disbursement of close on to a million, each dollar of which must be closely analyzed and accounted for. The painstaking labor and effort which this big expenditure of money entails cannot be here indicated. Suffice it to say that Boards of Education already realize that the chair of the business executive must be filled by men who are properly qualified and fitted for their work and that this work calls for those who are as expert in their particular field as is the educational expert or superintendent.

#### Relation to the Superintendent.

It is not the writer's intention to ignore the relation which the superintendent bears to the business division of his schools. As asserted

in the report of the United States Commissioner of Education for 1914, the time will never come when a superintendent may be entirely divorced from his system's business affairs. In purchasing janitors' supplies or when driving a bargain for a thousand tons of coal, the business executive may prove the equal or the superior of the educational expert, but when it comes to downright needs of instruction, none is better qualified to judge than the superintendent himself, who, for this very reason, should keep more or less in touch with the real business affairs of his schools.

Nor does the writer claim that superintendents are not good businessmen. Often he has read and heard it stated that they are not, but his judgment is that a sympathetic harmony between the heads of the business and scholastic departments, the willingness to consult each other on questions relating to business and the following out of any helpful ideas advanced by the superintendent, will work toward the general betterment of a school system. While it is true that a business executive is by no means fitted, either by training or experience, to usurp the prerogatives of a superintendent, it is not true that the superintendent is unfitted for business, despite the argument that schoolmen in general are dealing continually with ideals and theories, while those engaged in business rub elbows more often with hard common sense.

A good superintendent is one who can readily combine the common sense of business with the theories and practices of education.

A good Secretary-Business Manager is one who will devote himself to the physical part of his school system, leaving all that concerns the teaching corps, selection of textbooks, etc., to the superintendent.

He will find enough to keep him busily engaged without concerning himself with matters which properly come within the realm of the superintendent.

## A NEGLECTED PHASE IN TEACHING SAFETY

Kent S. Clow, Esq., Chicago, Ill.

Statements issued by the Interstate Commerce Commission for January, February and March of this year, and the Bulletin for the preceding quarter, show that during the six months covered by these reports, out of a total of 3662 persons killed in all kinds of railroad accidents, 2165, or nearly sixty per cent, were trespassers. Testimony to the great care with which the traveling public is continuously transported over the 250,000 miles of lines in the United States, day and night thru fog, snow, storm and clear weather, is afforded by the fact that only fourteen passengers were killed in train accidents, and only two were killed in a collision, altho during this period the number of passengers carried one mile was over seventeen billions. It has been pointed out that at this rate the average passenger could travel continuously at a speed of sixty miles an hour for 16,770 years before meeting death in a collision!

But while railroad travel is a very safe and comfortable matter for the passengers and increasingly safe for the employees of the railroads, who spend millions every year in maintenance of safety devices and in safety-first campaigns, over 5,000 persons are killed annually in the United States while trespassing on railroad tracks. Many think of the trespasser as a "hobo," beating his way from town to town and from jail to jail, robbing and begging as he goes. But study of accident statistics reveals that the greater majority of these victims of their own carelessness are wage earners, professional men, mothers and children. These fatalities to trespassers, while classed as railroad accidents, are accidents for which the public alone is responsible, and they cause a greater loss of life on American railroads than all other causes combined. More people are killed every year trespassing on the railroad tracks in the United States than the total number who lost their lives in the Johnstown flood, the San Francisco earthquake and fire, the Salem, Baltimore and Jacksonville fires, and the sinking of the Lusitania and the Eastland. A recent Bulletin of the Pennsylvania railroad character-

izes this as "the most needless waste of human life in America" and adds "If five thousand people were killed by some disaster tomorrow on the streets of New York or Chicago, the whole nation would respond with help for the widows and orphans. Steps would immediately be taken to prevent the recurrence of such a disaster." But because these trespassers are killed one at a time in every state in the Union, nobody bothers.

In Bulletin No. 16 of the Railway Business Association, "The Deadly Toll of Trespass on Railways," 35 states were mentioned as having no law specifically prohibiting persons walking on the right-of-way. Since that Bulletin was published in January, 1915, bills prohibiting railway trespass have been introduced in 22 of these states, but only passed in three.

In the last 24 years 108,000 persons were killed and 117,000 were injured while trespassing on railroad property—a casualty list equal to the death and disablement of every inhabitant in a state the size of Denver, Columbus or Atlanta. Of these 225,000 victims of American indifference to a grave peril, 31,000 were children under 18 years of age who lost lives or limbs while using the railroad to take short cuts home, or while playing around station yards. In the Bulletin of the Railway Business Association it was pointed out that accidents to trespassers in the United States from 1901 to 1910 were 50,025 killed and 53,427 injured. In the United States laws against railroad trespassing are generally not enforced. In Great Britain, where persons other than passengers or employees found on railway property are fined \$10 for each offence, only 4,434 persons were killed and 1,315 injured from 1901 to 1910. France, Germany and Canada also all have laws against railway trespass which are vigorously enforced.

#### What the Schools Can Do.

The school teachers of the United States can perform a useful public service by relating anecdotes of the sad fate of children who have

(Concluded on Page 64)



# MECHANICAL EQUIPMENT OF SCHOOLS

Harold L. Alt, M. E.

(Article Eight: Number and Location of Plumbing Fixtures)

The matter of partitions in toilet rooms is a most important one and should be given careful consideration by every school board. These partitions ought to be non absorbent, substantial, pleasing in appearance, and should be built with the least possible amount of metal work. Formerly and even at the present time slate is much used, altho alberene stone has of late years been widely adopted. Marble is seldom, if ever used, in school work owing to the expense, while Argentine glass undoubtedly produces the finest kind of result.

Argentine glass is milk-white and non-transparent. It is produced in sheets about one inch thick, and gives an inviting and sanitary ap-

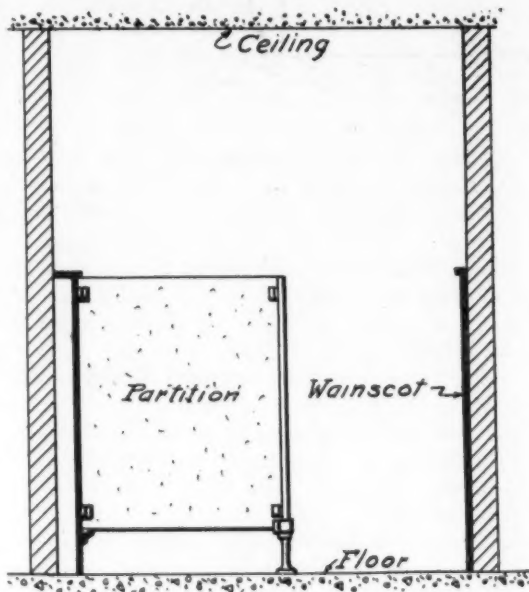


Fig. 78.

pearance attained by no other material. This glass, of course, will not stand so much hard usage as other materials and it is therefore impracticable to build partitions of it except where a reasonable amount of care may be expected. For instance, Argentine glass partitions may be used in high schools but never in grammar schools.

Where alberene stone is employed it is cut in slabs one inch or one and a quarter inches thick, is polished and made up with rabbitted joints. The alberene partition is of a grayish color with long black veins which are likely to extend thru portions of the stone. These veins give the appearance of weakness with danger of

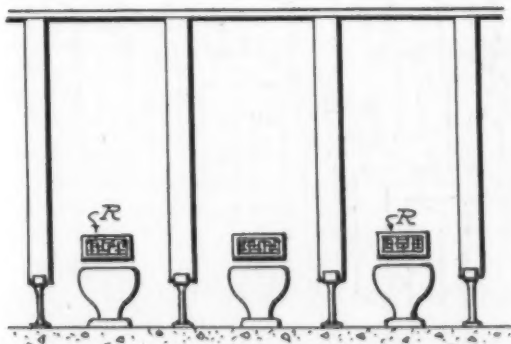


Fig. 79.

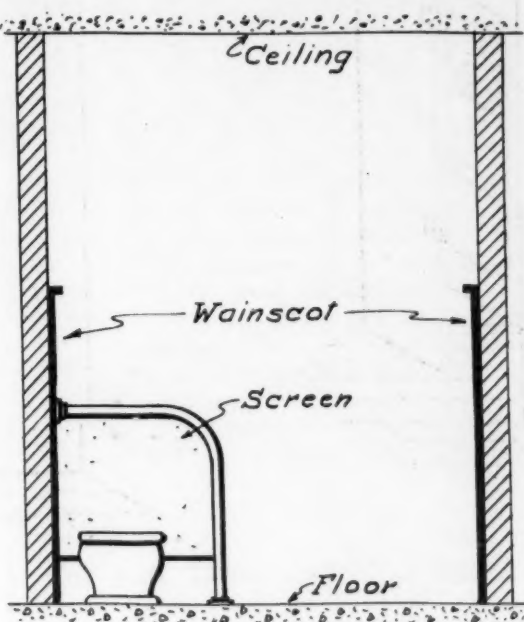


Fig. 80.

possible future cracks; but this danger is confined to appearance only, as the stone is at least as strong—if not stronger—at the veins than in the clear material.

Slate, the old standard material, requires little argument or explanation owing to its extensive use. Almost every school employs slate partitions to a greater or lesser extent. The chief objection—if it is an objection—to slate, is the appearance which is dark and uninviting. Slate partitions also offer much opportunity for scratching and for marking objectionable pictures and writing on the toilet room walls. This latter, of course, is highly undesirable.

One school board has, after much experimentation, adopted the slate partition painted white, and provides each janitor with a can of quick drying white paint. Every day at the close of the school session the partitions and walls are inspected and all writings are disposed of in a moment by a little white paint. This paint becomes dry before the beginning of the school session the next morning.

The normal water closet enclosure which is shown in Fig. 78 should be about 4 ft. or 4 ft. 6 in. deep, 6 ft. 6 in. high and should have the back set out 6 in. from the wall to conceal the piping and also to serve as vent space. While the backs of the enclosure should extend solid to the floor, the partitions between the enclosures should be supported 12 in. above the floor, to permit the free circulation of air about and around the fixtures. The partition slabs are usually supported by angle clips and by being set into the back slab, while at the front iron or brass standards are used. The standards generally extend down and are embedded in the floor.

The wainscot is usually made of the same material as the partitions and compartments, altho sometimes a tile wainscot is used. This should extend the same height, namely 6 ft. 6 in. above the floor. It is usually provided with a small cap piece for a finish. In Fig. 79 a view is shown of the same type of compartments (looking the other way) indicating the most satisfactory method of ventilating a toilet room, namely, thru a register R placed back of the water closet. This does away with all discussion as to the sanitary or insanitary qualities of the local vent closet and secures equal or possibly superior ventilation results.

Let me call attention to a danger which seems

to be on the increase. This is the instilling into the younger generation of what might be termed a "lack of decency" for which some boards are almost criminally responsible. It is not believed that any member of any modern school board would install a water closet in his own home in an open hall without screens where members of the family are constantly passing back and forth. Yet in the school, toilet rooms (in which a constant promenade is going back and forth) are often provided with fixtures—possibly with screens between them—without doors and provocative of a lack of modesty which is far from what parents desire.

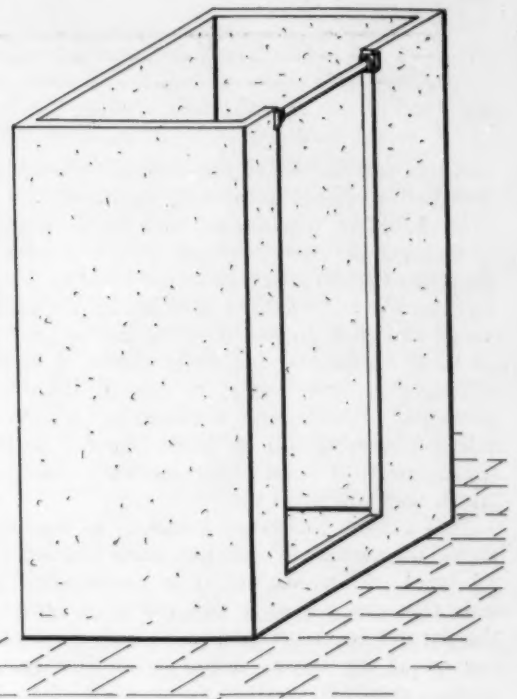


Fig. 82.

As an example of this we have toilet rooms in many schools built somewhat on the scheme shown in Fig. 80 in which a simple dividing screen, made of sheet iron and supported on a piece of bent pipe, is used to avoid the expense of a proper closet partition. Arguments in favor of this arrangement can be heard on the basis of economy, better circulation of air, increased light, etc., etc. But after all advantages have been duly weighed, the fact cannot be overcome that water closets installed in this manner should be considered a nuisance by the com-

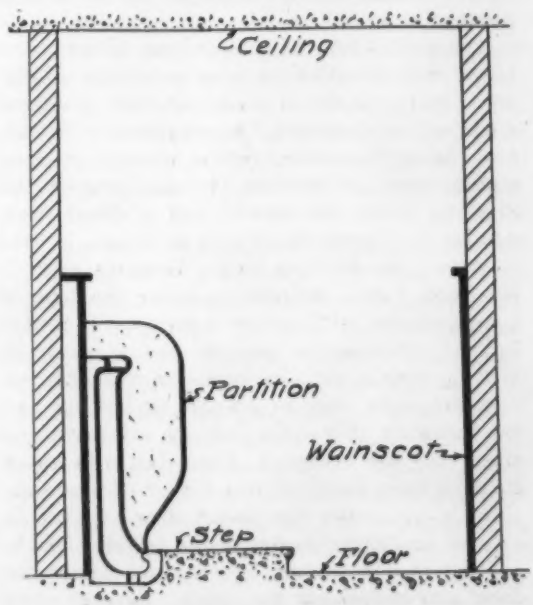


Fig. 81.

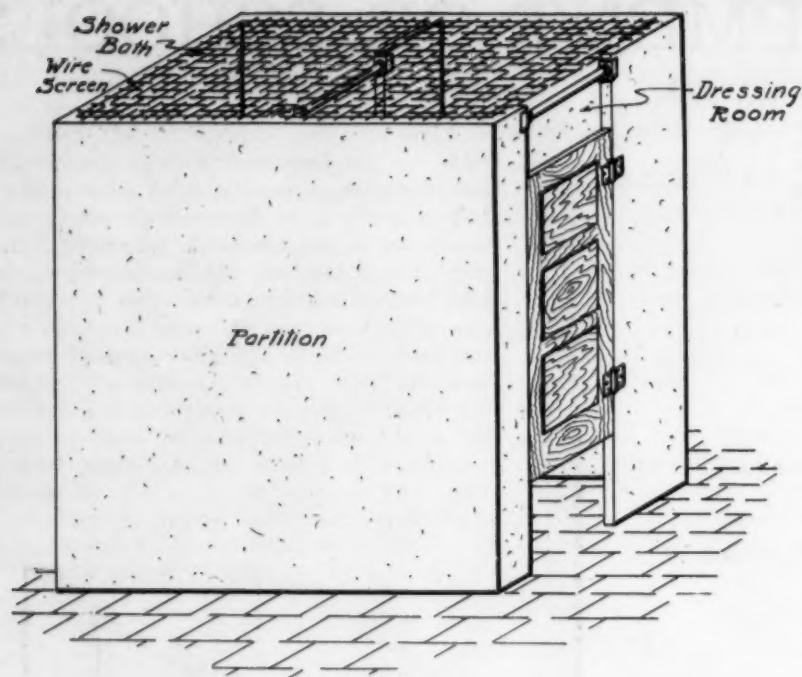


Fig. 83.

munity, and the board responsible for such an installation should be severely censured.

It should be remembered that, where a pupil is required by law to attend school a certain number of hours a day, he or she must of necessity use the toilet fixtures provided by the school board and that the board, in failing to provide suitable enclosures, indirectly forces a pupil, willingly or unwillingly, to use the facilities provided. Under such a condition of affairs school boards should be doubly careful in the arrangement of toilet rooms and the manner in which they are fitted up.

This subject brings up another. It was formerly the custom to omit partitions entirely on all types of urinals, yet it is encouraging to note that the use of a slab partition between the fixtures as shown in Fig. 81 and the dividing off of the trough urinal by similar partitions is gradually coming into practice. Fig. 81 is a good example of individual fixtures, properly partitioned, with a vent space in the rear into which an integral local vent from the fixtures, or a local vent from the pipe below the fixtures, can be connected.

Shower bath stalls are built in three ways. The first is the individual shower bath stall as shown in Fig. 82. This stall is about 3 ft. square and 6 ft. 6 in. high. The walls are carried down to the floor slab on all sides and the doorway is cut down to within 6 in. of the floor, the 6 in. below this point serving as a curb to retain the splashing water. The top of the doorway is formed by a rod which serves as a brace for the slabs, and from which the curtain is hung by rings.

The second type of shower bath is that combined with the dressing room as shown in Fig. 83. This consists of a shower bath compartment as just described, the compartment in this case, however, opening into a dressing room of similar size. A curtain is used between the dressing room and shower and a dwarf door, similar to a water closet door as shown, is used to screen the dressing room. In many cases it has been found desirable to cover the tops of compartments with a wire screen, as indicated in the drawing, to prevent the stealing of clothes, towels, etc., by pupils in the adjacent compartments, and to prevent skylarking and the throwing of missiles into the compartments when they are occupied. Care should be taken in an arrangement of this kind to leave sufficient room under the dwarf door so that in case of emergency access to the interior can be had by the instructor by crawling under the door and unlocking the same. Several cases have been known where persons have been taken

suddenly ill or have fainted while using a shower thus requiring immediate attention and outside help.

The third type of shower is shown in Fig. 84. This consists of a shower compartment as previously described and an outer room 18 to 24 inches wide in which a hook is placed. The purpose of this outer room is to keep dry a sheet or dressing gown, bath slippers and bath towel. Showers arranged in this manner are generally used in connection with a girls' locker room. The arrangement is somewhat as shown in Fig. 85, where S indicates the showers and outer rooms; P. S. is a pipe space, between the two rows of shower baths, and D an access door for repairs. In a scheme of this kind each girl pupil is assigned a dressing room in which she removes her outer clothing preparatory to the use of the shower. Sheets are usually provided by the school to be worn in passing from the dressing room to the shower bath, altho some pupils prefer to use a bathrobe or dressing gown. It will be seen from Fig. 85 that while some of the dressing rooms are very convenient to the showers others are at a considerable distance.

The method of procedure for the pupils is briefly as follows: Wrapped in sheets and wearing slippers, the girls pass from their individual dressing rooms to the outer rooms of the showers. These outer rooms may be protected by a curtain or a dwarf door similar to the one previously shown. The towels, sheets or gowns and slippers are placed in the outer rooms and the shower baths taken in the adjacent shower compartments, curtains being placed between the outer rooms and the showers in order to keep the articles in the outer rooms dry. On completion of the bath the pupils dry themselves in the shower compartments, step into the outer rooms, don slippers and sheets or robes and return to the dressing rooms to complete their dressing.

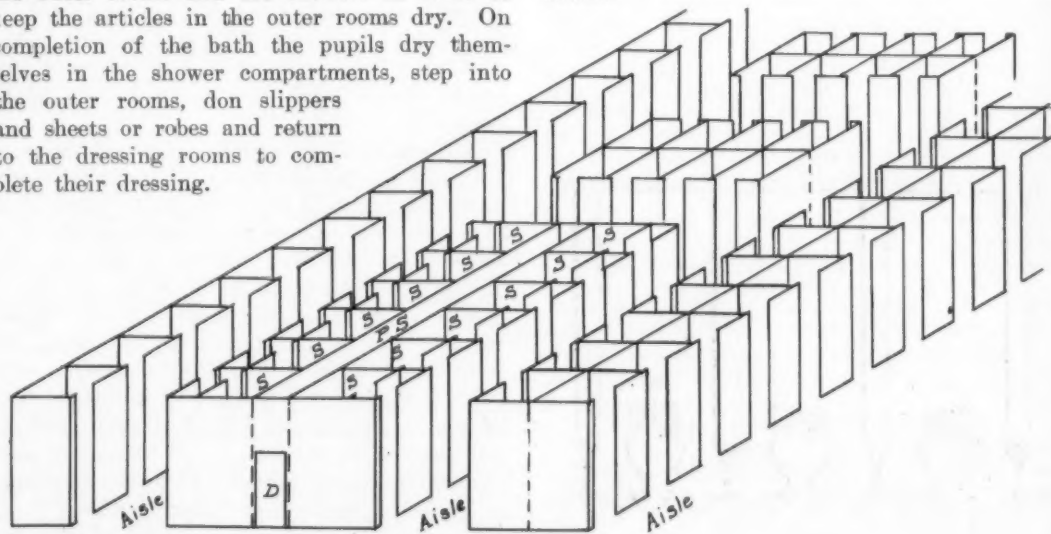


Fig. 85.

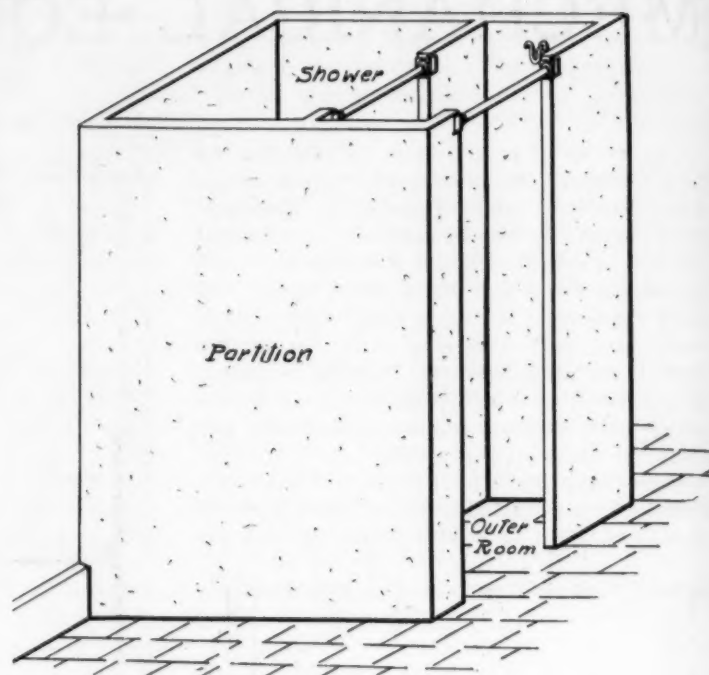


Fig. 84.

There are great advantages with this arrangement involving as it does a minimum time in the shower and making fewer showers serve a larger number of pupils satisfactorily. It allows the showers to be placed closely together, simplifies and economizes the plumbing, and above all allows the pupil the privacy which all are justified in demanding.

The metal work for partitions should be kept down to the smallest possible amount. Such as must be used is generally made to correspond with the fixture trimmings. Nickel plated brass is more commonly used than any other one material, yet it is far from being satisfactory for continued service. The nickel—if polished—soon wears off and, if not polished, gets dirty and becomes covered with verdigris caused by the splashing water which combines with the copper in the brass body underneath.

Polished brass is used to some extent, this material being of solid metal and always of the same standard appearance when kept polished. It is cheaper than nickel plated material.

Red metal is brass with an unusually high amount of copper in the composition (85 per cent or more); this is being adopted in some of the newer schools.

White metal is by far the most satisfactory of all the various materials, but it is also much higher in cost. It is a metallic composition which has exactly the appearance of nickel plate, but is liable to tarnish more quickly. Its use is recommended wherever financial considerations permit. Sometimes economy can be effected by using galvanized cast iron piping underneath the lavatories and painting same with white enamel to match the color of the fixture.



# SCHOOL CREDITS FOR HOME WORK

Supt. S. R. Shear, Poughkeepsie, N. Y.

The question "how far is it desirable and practicable to give credit for home duties not immediately related to the work of the school?" grants at the inception that such credit should be given at least in a degree, and I shall proceed upon the assumption that we are agreed upon that point. However, it is well to strengthen the proposition by discussion of the reasons why such credits are desirable.

First, this plan dignifies labor. At one time I lived for a number of years in one of the cities of this State and on a street where the people were fairly well to do. As I recall the circumstances, I was the only man on the street who mowed my own lawn, swept my own walk, shoveled the snow, attended to the heater, rolled out the ash barrel, and cultivated my own garden. There seemed to be a settled opinion, a sort of unwritten law that a professional man should not concern himself with matters of that sort. A man recently said to me that this democracy could never be a success until we have a leisure class to do our governing. Many parents, especially those who labored hard when young but who have attained a degree of opulence, feel that their children should not work at manual labor. There is a general disposition to feel that mental work is more dignified than work with the hands. At an Italian banquet in our own city last week one speaker said that he hoped the Italians would not always be working with the pick and shovel. Children have a feeling that the home duties in no manner compare in dignity with the pursuit of Latin, science or mathematics. The direct result of giving school credit for home duties is to dignify manual labor on the part of those who are obliged to do it, and to arouse a feeling on the part of those who do not, that it would be better if they did.

## Home Duties and Responsibilities.

Granting of credits for home duties develops the vicarious spirit without which no one is truly educated. I confess to a feeling of discomfort and perhaps disgust when I meet on the streets of our city a pale, stoop-shouldered, emaciated woman wheeling a baby carriage and intent upon reaching home so that she may prepare the evening meal for a large family, and a block or two further on meet a strong, red-cheeked, healthy-looking high school girl whom I know to be the daughter of the aforesaid woman; a young lady whom I know does nothing in the home to lighten the burden of the overwrought mother, and it has never occurred to either mother or daughter that there is anything unreasonable and inconsistent in the situation. If a high school girl feels that her home duties are put on a par with her school duties, and are regarded by the teachers with just as much respect, and are to be given just as much weight in the matter of promotion, this same girl becomes a dutiful and helpful daughter. The home is happier, more contented, and more delightful for all concerned.

The proposed plan creates a sense of responsibility. When Washington was inaugurated President of the United States, Philadelphia boasted a population of 42,000; New York, 35,000; Boston, the third largest city in the United States, had a population of 18,000; Brooklyn was a village of 16,000 souls; Chicago, Denver, and San Francisco had never even been thought of. At the present time Philadelphia has a population of over a million and a half, New York has nearly five millions, Boston nearly 700,000, Baltimore over 500,000, while Chicago,

which had but 4,000 population in 1840, now has a population of over two million. At the time of Washington's inauguration, three out of every hundred Americans lived in cities with a population of 8,000 or more. Today 33 out of a hundred is the ratio, while 47 out of every hundred live either in cities or incorporated villages. In other words, about one-half our population is urban residents. I mention these statistics to indicate that we are no longer an agricultural country, and that hundreds of thousands of our boys and girls have no chores to do. They have no regular duties to perform; at least, they think they have not, and the parents are of the same opinion. A mother recently brought to me a boy in the sixth grade, and in the process of our interview she assured me that the boy had never had a single responsibility placed upon him. I felt like saying to her that there are others just as unfortunate as the boy, and just as foolish as his fond mamma. The businessmen of our city assure me that boys and girls today are lacking in initiative, in power to originate, to assume responsibility, and to do without being told, and it occurs to me that one of the greatest blessings that we could bestow upon young people is a sense of responsibility.

## Work and School Success.

Again our principals assure me that the children who have most to do at home are likely to be those who do best at school. They have learned how to work, they have imbibed the joy of achievement, they have acquired the power of self-direction. And the encouragement of home duties certainly makes for the health of boys and girls. Not many years ago I sat at a dinner with a friend, and while we were discussing our dessert a telegram was handed him conveying the information that his son, a student at Yale, was very low with pneumonia. I shall never forget the agony with which he uttered these words: "Oh, if I had only insisted upon Eugene doing something to develop his physique. He was always tied to a book; his mind is developed, but his poor body is in no condition to withstand the ravages of this disease." Education means the harmonious and proportionate development of the physical, mental, and spiritual, and the school or the teacher that fails to grasp this great fundamental principle lacks educational insight.

Again the proposed plan means practical manual training. There is no question but what our girls should be taught cooking and sewing in the schools, because every girl should know how to do these things, either that she may do them herself or be able to direct her servants. But when it comes to manual training for the boys, we are not so sure of our ground. We give certain courses in manual training which have a degree of value, but we are not just sure as to the practical results, and I am fully satisfied that there is a whole lot of material in manual training departments around this country that ten years from now will be in the junk heap, not because it is worn out but because we will have learned that there is no practical value in its use. Home duties constitute a practical sort of manual training. It has been said that a university is a place where we do things which we will never do in after life, thru methods which will always be used. Home duties constitute activities that we shall always perform by methods which will never grow old.

## Preparation for Later Work.

In all cities there are boys and girls who have certain bread-winning duties to perform and certain responsibilities in the home which can-

not be shirked, and there are others who have absolutely no responsibility in the home. Giving school credit for home duties will put the former class on a fair working basis with the latter; hence, justice is rendered to all. For two or three years until the opening of our present high school, we were obliged to deal with our senior, junior, and sophomore classes from eight to twelve, and with our freshman classes from one to five, and during all that time literally hundreds of these children were obliged to work a half day in a store or a factory or some such place, attend school the other half day, and do their home work as best they could. I felt that those children ought to in some way be put on a par with those who had nothing to do but their school work. Of course under present conditions in this state it is impossible to give home credits except in the grades, but I believe some way should be planned whereby high-school students as well might receive credit for work done outside of the regular school duties.

Our plan makes for home-making. Our Temperance Advocates maintain that the liquor question could be solved if our girls knew more about home-making. Peter Newell in his book of rhymes presents the following dialogue: A very tall man accosts a very small girl. "And can you tell me, little maid, where lives Philander Rouse?" And the reply follows: "He isn't living anywhere, he's boarding at our house." The Harvester makes one character say that he would prefer a home in Hell to a boarding house in Heaven. The home is the cornerstone of the nation, and we can do little better in the line of training for citizenship than to develop a better knowledge of home-making.

## A Bond Between School and Home.

Giving school credits for home work increases sympathy between the home and the school, and hence increases the efficiency of the schools. In working out our plan we find that many parents do not understand, but when the teacher has called on the parent and explained the situation, there is always great joy and profuse promises of co-operation; and, furthermore, the parents are more insistent upon the children doing their school duties in the home. A study of the cards enables the teacher to study the child. She learns to know something about his environment and about the burdens which he is bearing. She has a greater sympathy for the child and a better understanding of him. Visits to the home increase her knowledge of the child's environment, and increase the respect of the parent for the teacher, so that there is greater unity of action and a greater efficiency.

Our plan keeps the child off the streets, out of the poolrooms, and away from the "movies," which to my mind are the greatest curse of the schools that have been inflicted on us in a generation. Tardiness and absence are lessened, and the morals of the child are wonderfully improved.

I can anticipate all your objections, because objections can be raised to anything, but in places where the plan has been tried the objections have been far outweighed by the far-reaching benefits derived. Children welcome the plan, parents are in sympathy with it, and teachers can see the philosophy of what we propose. It has been urged that parents will falsify when signing the cards. I believe it is a rare parent who will deliberately falsify with the full understanding of the child, and the full knowledge of the parent.

We require no one to participate who does

(Concluded on Page 65)



SIDNEY HIGH SCHOOL, SIDNEY, O.  
Frank L. Packard, Architect, Columbus, O.

**THE SIDNEY HIGH SCHOOL.**  
Mr. Frank L. Packard, Architect. Messrs.  
Ralph Snyder and E. F. Babbitt,  
Associates.

The Sidney High School has been planned with a double purpose of affording an educational and civic center for the community which it serves and of becoming an architectural monument dominating an important part of the city of Sidney, Ohio. In design, the building follows a modified type of the English Gothic, suggesting with pleasing simplicity, the refinement, democracy and dignity which belong to high-school education.

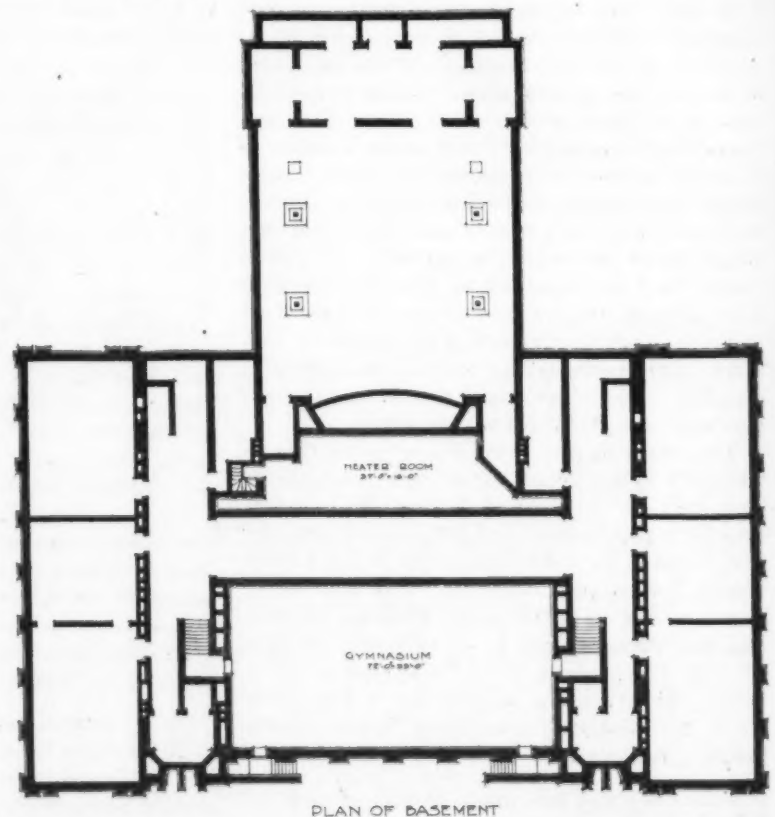
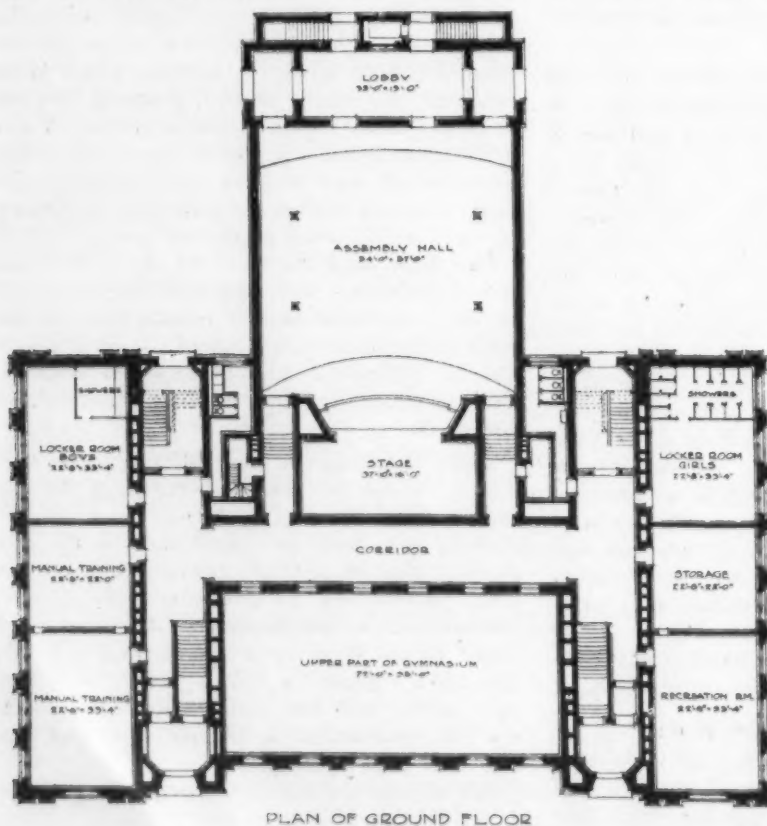
The plans of the building are the result of intelligent study and co-operation of the superintendent, the teachers and the architects. Before the architects drew a line, the requirement

of each department and the relations of each class to the whole school were thoroly studied. The use of the study hall, and the circulation of student groups between the study and the classrooms, shops and laboratories were carefully considered so that no room is inconveniently located and classes can come and go without crowding or congestion at any one door or stairway.

The extreme dimension of the building across the front is 160 feet and the depth of the main portion is 93 feet. The auditorium extends 72 feet back of the main lines of the building. The structure has a ground floor, a first floor and a second floor, and a basement which extends under only a portion of the front. The heating apparatus is located in the basement, and the gymnasium which is two stories in height, has

its floor level in the basement story. The gymnasium measures 35 x 72 feet, occupying the central front of the basement and ground floors.

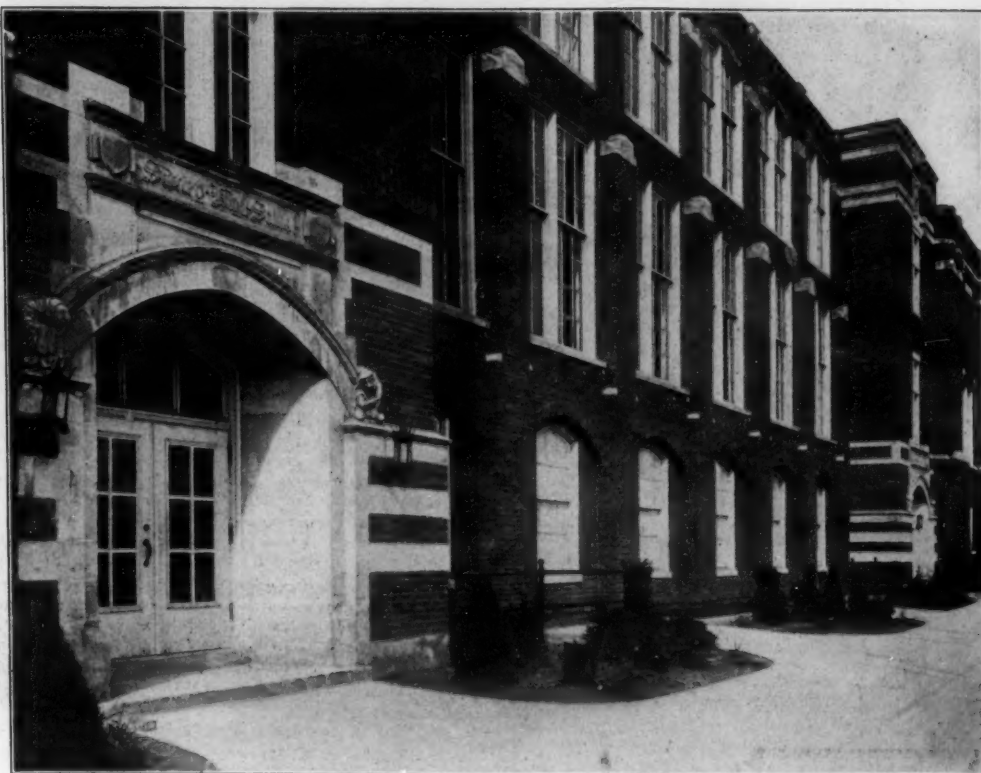
The gymnasium, which is 73 feet long and 36 feet wide, is well adapted to basketball and other games. Every pupil of the high school is given two forty-minute periods each week, for gymnasium, for basketball, indoor baseball, and other games, from the close of school at 3:10 until 5:00 o'clock, each evening. It is open to the different classes of boys each evening from 6:30 until 9:00 o'clock. Locker rooms and shower baths are conveniently located, and are freely used by all the pupils. Inter-class basketball games are played each Friday evening, at which time an admission of ten cents is charged. The game can be viewed thru the windows of the corridor, six feet above, and also from







AN ENTRANCE DETAIL.



DETAIL OF FRONT FACADE.

benches that have been built around the room. These benches serve the purpose of boxes for dumb bells, wands, and other apparatus. Two hundred spectators can thus be accommodated. These games are greatly enjoyed by the pupils, and by their parents and friends as well.

From the plans on pages 22 and 23 the general arrangement of the various floors will be seen. The entire ground floor is above grade and embraces the assembly hall with stage, manual training room, recreation room, locker room and toilets, and the second story portion of the gymnasium.

The auditorium has a large stage, with scenery, located just off the main corridor of the basement floor. The public entrance to the auditorium is at the further end of the building, so arranged that it can be used at any time without interruption to the school. The auditorium, which seats 800 people, is almost perfect as to its acoustic qualities, and is used almost continuously by the school and by the entire community. A small rental fee is charged for entertainments, political meetings, and the like. The city band uses it during the winter every two weeks for public concerts. A popular lec-

ture course is conducted by the teachers of the school. A first-class moving picture machine is used for instruction purposes and for entertainment of all the schools, and the people of the city. Many educational pictures are given to the public, free of charge, and other films are shown at minimum price. The object of the school management is to show these films, which are educational, for the beneficial influence upon the life of the city and the community.

The first floor embraces a large study room, of the same dimensions as the gymnasium, the balcony of the auditorium, eight classrooms, offices, rest rooms and toilets. The study room seats two hundred.

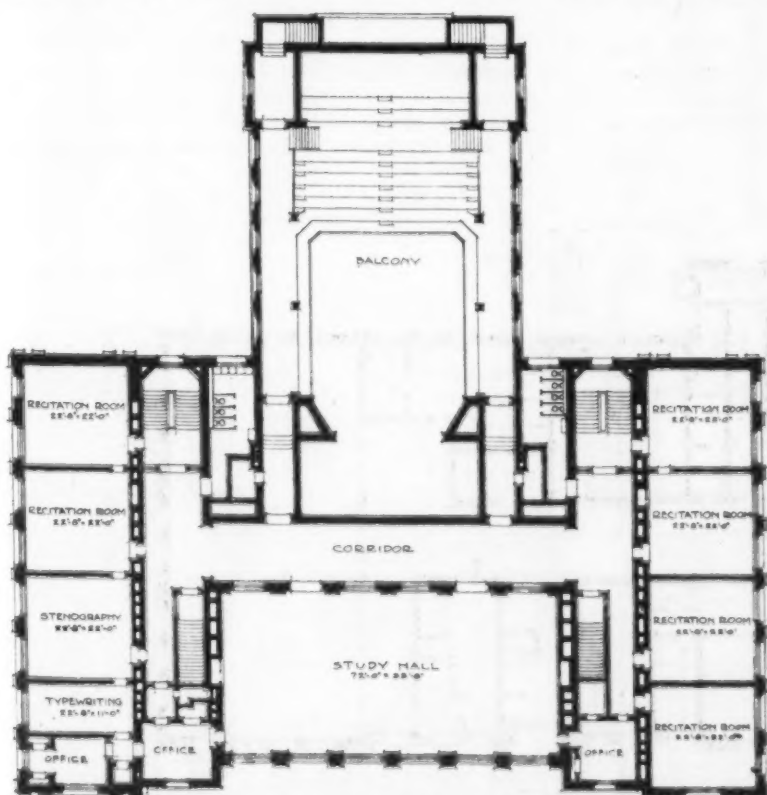
The building has sanitary equipment of the best school type. Heating and ventilation are effected by means of warm air furnaces equipped with electrically driven blowers.

The exterior is finished in a rough tapestry brick varying in shade from red to brown, laid with a prominent mortar joint of a natural color. The trimmings are Bedford stone, carved very simply.

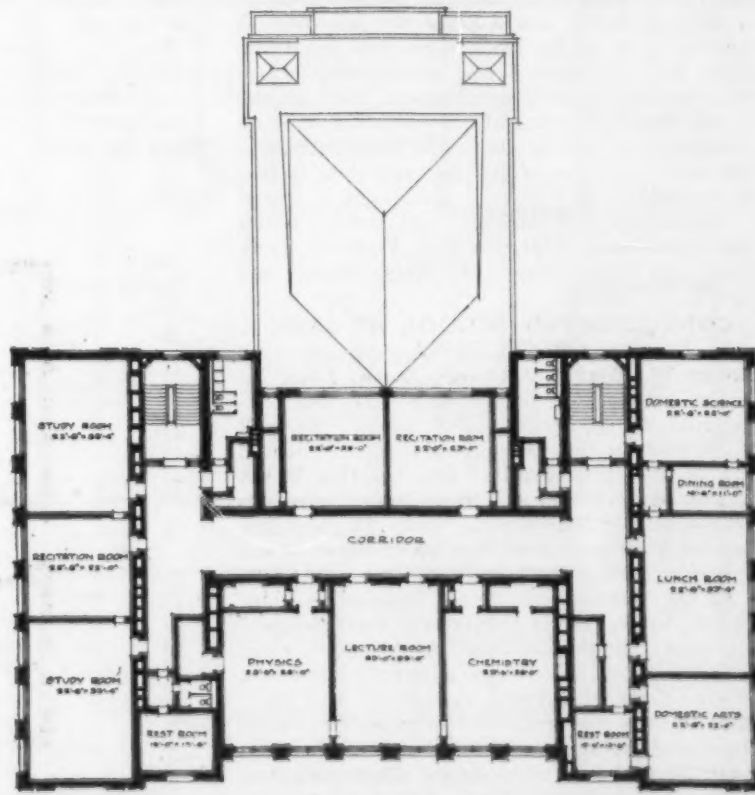
In the interior finish, light and sanitary upkeep have been especially considered. Considerable glazed brick has been used for the wainscoting and walls of the toilets, corridors, gymnasium, etc. The wood trim in the toilets, corridors, stair landings and platforms are tile or terrazzo. For the classroom floors, hard maple has been used, and in the less used rooms, plain cement.

The general contract for the building was \$89,096.31, and the heating and ventilation plant cost \$8,750. The total cost of the building was \$97,846.31, without architects' fees, movable furniture and site.

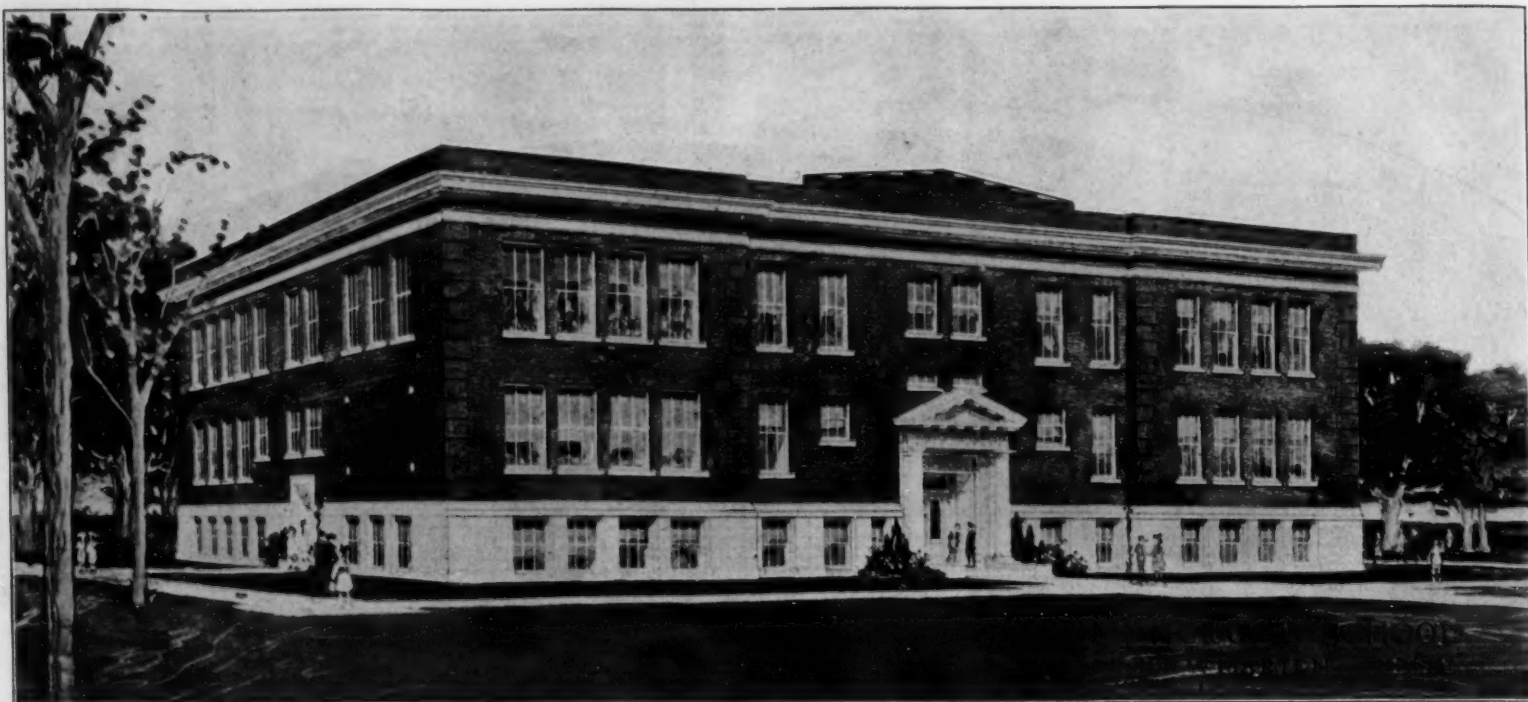
A playground and athletic field of more than four acres, has been acquired at an expense of nearly \$15,000. This has been accomplished thru the generosity of friends and by the work of the teachers and pupils of the schools of the city. This field immediately joins the high school yard, which in itself consists of two acres. The athletic field, however, is 20 feet lower than the school yard proper. Since it has been graded, at an expense of \$5,000, the bank



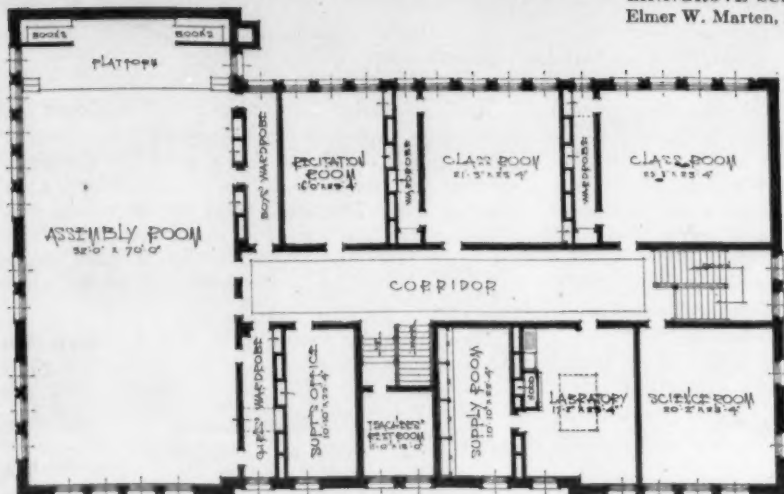
PLAN OF FIRST FLOOR



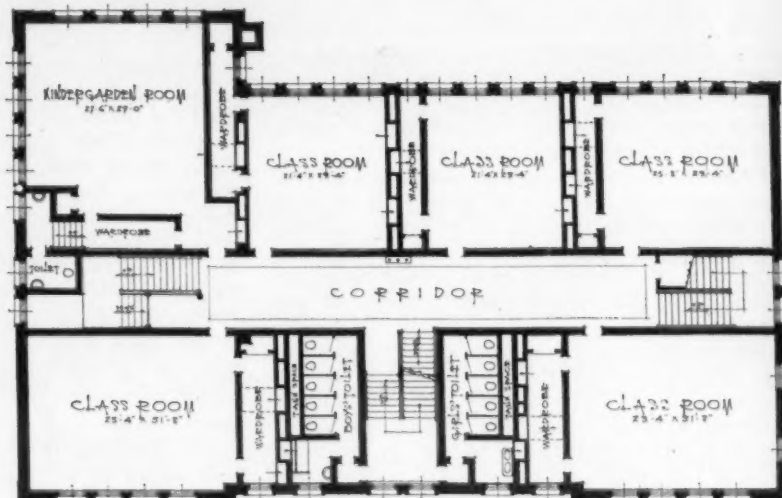
PLAN OF SECOND FLOOR



LINNGROVE SCHOOL, LINNGROVE, IA.  
Elmer W. Marten, Architect, Storm Lake, Ia.



SECOND FLOOR PLAN  
Scale 1/8" = 1'-0"



FIRST FLOOR PLAN  
Scale 1/8" = 1'-0"

separating it from the school yard forms an opportunity to build a stadium, and the Board of Education has planned to do so. The further side of this field is washed by the Great Miami River, which makes it possible to have a bathing beach and a place for boating. A quarter mile cinder track surrounds the entire field, and the whole forms an opportunity for athletic and physical development, such as can be enjoyed by few schools. During the summer months this field is used as a playground for the small children of the city and it is largely patronized.

The school was designed and erected under the supervision of Mr. Frank L. Packard, Architect, and his associates, Mr. Ralph Snyder and Mr. E. F. Babbitt.

#### CONSOLIDATED SCHOOL AT LINNGROVE, IOWA.

Elmer W. Marten, Architect, Storm Lake, Ia.

The possibilities, both architectural and educational of the consolidated school, are well illustrated in the new Linngrove Consolidated School at Linngrove, Ia. The building is 116 feet in length by 62 feet in width, and contains approximately 350,000 cubic feet. The building has two main entrances from which direct access is had to the basement and first floor.

In the basement there is a large gymnasium 29 feet by 60 feet in size, also a manual training room, lumber storage room, boiler room with fuel and ash rooms adjoining, domestic science room with dining room, boys' and girls' locker rooms, five fresh air chambers, a janitor's closet and storage room.

On the first floor there are six classrooms, each with a wardrobe adjoining. The kindergarten room has a separate toiletroom.

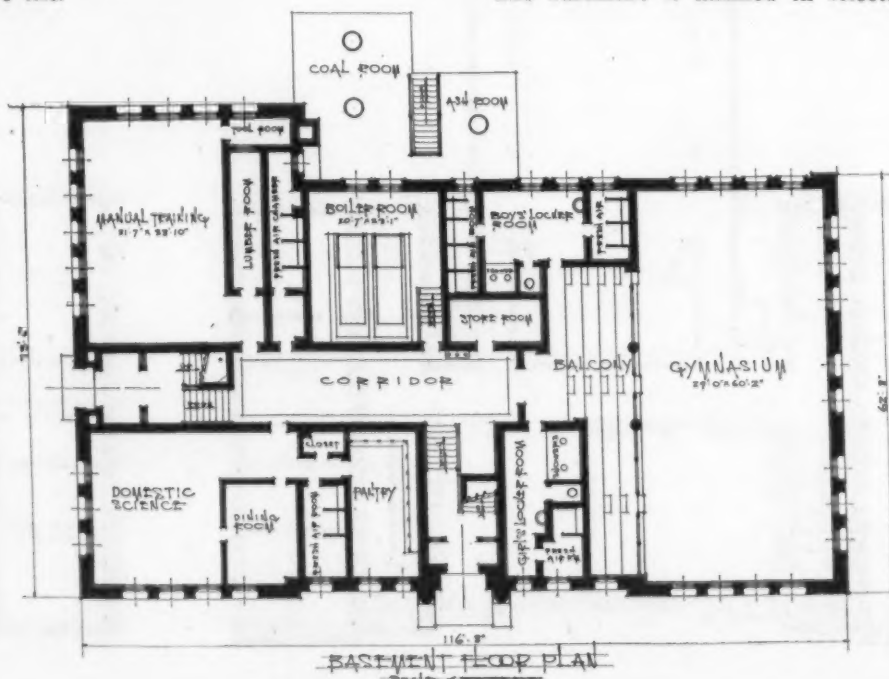
On the second floor there is a large assembly room 32 feet by 70 feet long. There are two classrooms with wardrobes adjoining, a recitation room, laboratory, and apparatus room, superintendent's office, science room, and teachers' restroom.

The two toiletrooms are entered from the first stair landing making their location equidistant from both first and second floors. The closet partitions are of galvanized iron, and the floors are tile.

The building is substantially constructed of concrete, brick, stone and hollow tile. The exterior is finished in dark red, mat-face brick, with Bedford stone base and trim. The corridors are finished in reinforced concrete polished to a terrazzo finish.

The stairways are constructed of steel and concrete. The floor directly over the boiler room is of reinforced concrete making the building semi-fireproof.

The basement is finished in selected yellow



BASMENT FLOOR PLAN  
Scale 1/8" = 1'-0"





NEW SCHOOL, ATHENS, TEX.  
Geo. L. Burnett, Architect, Waco, Tex.

pine; the first and second floors are finished in quarter-sawn red oak.

The classrooms are to be equipped with the latest type of adjustable furniture. Blackboards are of natural slate.

The heating and ventilating system consists of the stack gravity system supplemented by direct steam radiation.

The building cost \$37,250 for the general contract, which was let to the J. F. Leefers Co., of Cedar Rapids, Iowa. The heating, ventilating and plumbing cost \$5,840.

The building was designed and has been constructed under the superintendence of Elmer W. Marten, of Storm Lake, Iowa, who has now associated with him Mr. Henry J. B. Hoskins, A. R. I. B. A.

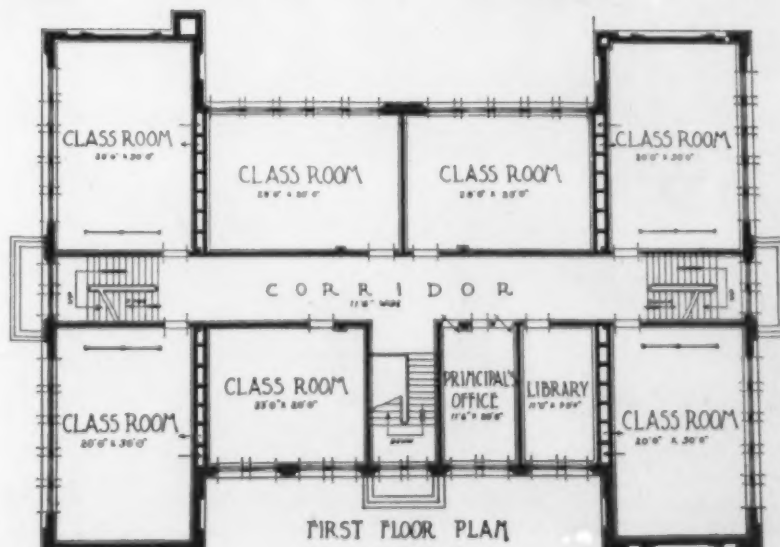
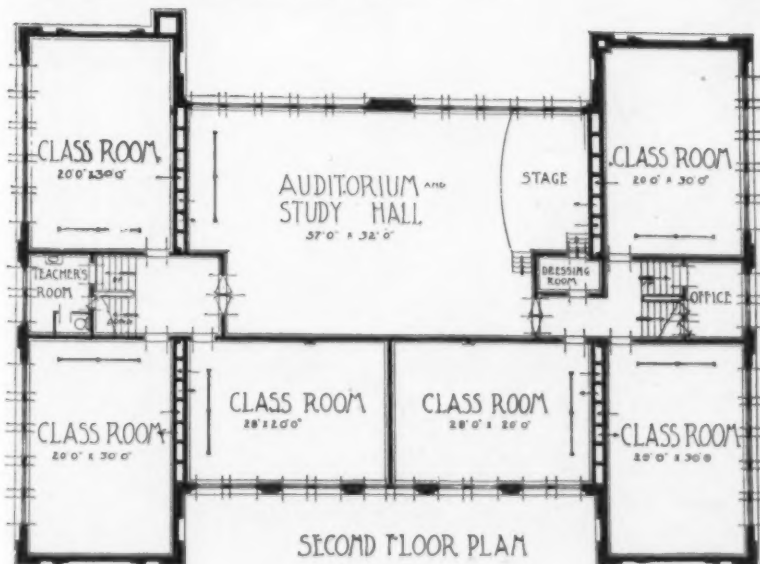
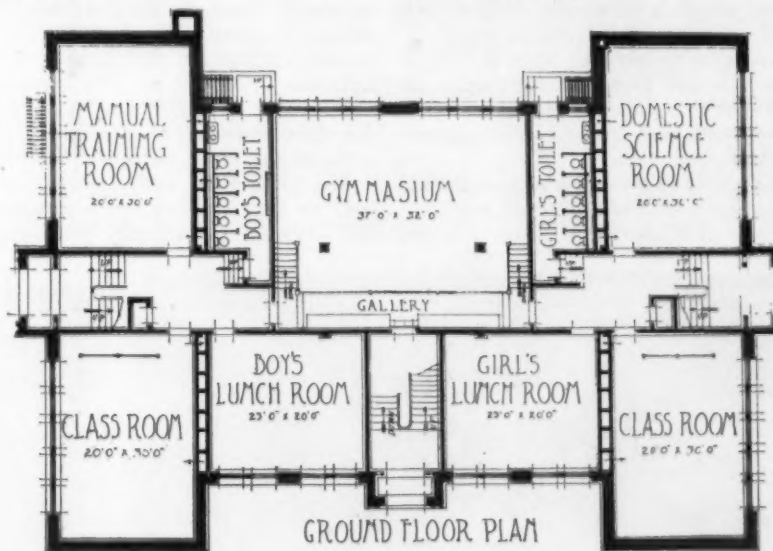
#### THE NEW ATHENS, TEX., HIGH SCHOOL.

That the small city may enjoy all the advantages of a fireproof and thoroly up-to-date school building is well exemplified in the new high school at Athens, Tex. The building, which was designed by Mr. George Burnett, Architect, Waco, Texas, was completed at a cost of less than \$40,000. It is fireproof thru-out, being built of reinforced concrete. The

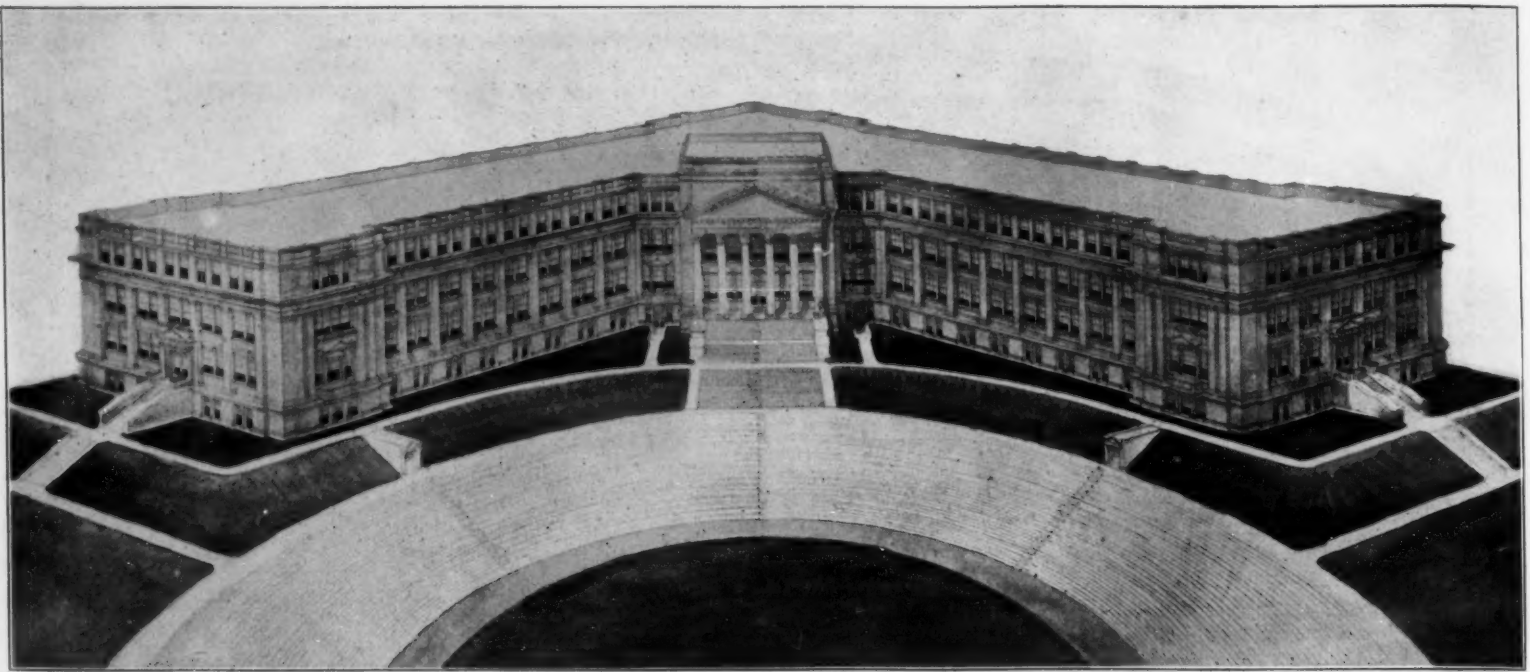
exterior walls are faced with pressed brick, trimmed with artificial stone.

Extreme simplicity has been maintained in order to keep the cost within the means at the disposal of the school district.

While the building serves at the present as a high and grade school, it will be ultimately used for grade purposes entirely. When this is done it will be possible to turn the improvised auditorium into classrooms.



FLOOR PLANS, ATHENS HIGH SCHOOL.



EL PASO HIGH SCHOOL, EL PASO, TEX.  
Trost & Trost, Architects, El Paso, Tex.

**THE NEW EL PASO HIGH SCHOOL.**  
By R. J. Tighe, Superintendent of the El Paso Schools.

The new high school under construction in El Paso is to be one of the most complete institutions of its kind in the United States. The first contract for the shell of the building has been let for \$105,000, but when the building is completed and equipped and the stadium built, the cost will not be less than \$500,000.

The building site comprises four city blocks, centrally located for the mass of high-school population. The grounds when graded will cost \$50,000, and the stadium and athletic field approximately \$50,000 more.

The building, which is of classic design, and in the form of a right angle, faces the stadium and the south-east. The extreme outside length of the structure is 600 feet and the width at each end is 83 feet 6 inches. It covers an area of 50,000 square feet, and the cubical contents measure 2,350,000 cubic feet.

There are to be four floors and a sub-basement for the heating and ventilating plant and an automobile shop. On the first floor will be

located the manual arts department which will include shops for wood-working, metal working, machinery, plumbing, foundry and forge work; the domestic arts department, comprising a five room flat, a cooking room and rooms for sewing and millinery; two large gymnasiums for boys and girls, each opening on to the stadium thru a tunnel; a large lunchroom with kitchen connecting, and an armory. There will also be locker rooms for boys and girls, and the offices for the art department.

On the second floor, at the vertex of the angle, will be located the Auditorium, which is to seat about 1,500 persons. This room will be fan shaped, so that every part of the stage will be visible from the farthest corner of the main floor or balcony. The main hall at the entrance to the Auditorium will have a width of 22 feet 6 inches. This floor will have sixteen classrooms, four of which are large so as to provide for class and society meetings. The offices are to be at the main entrance.

The third floor will contain, besides the balcony to the Auditorium, a large reading room and library, stock rooms, two large study halls,

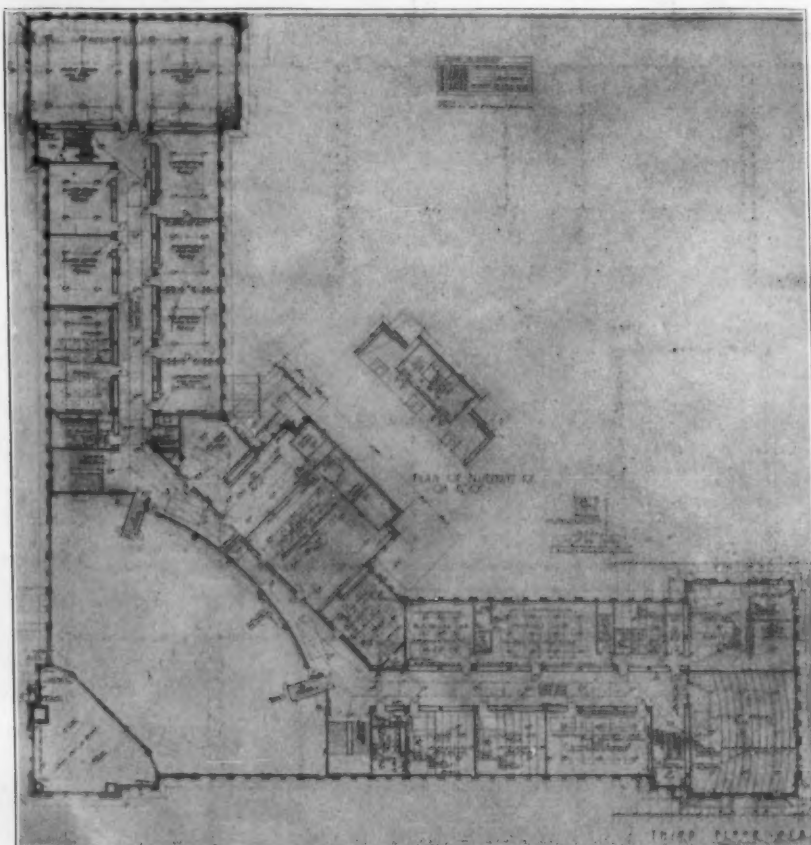
twelve classrooms, two locker rooms, toilets, and teachers' room.

The fourth floor is to contain laboratories for physics, chemistry, biology, geology, electricity, and one large and two smaller lecture rooms. The science department will occupy the whole of the south wing on this floor. The east wing will be taken up with the commercial department, including five rooms, a large music room, two classrooms, and a physiography laboratory. The central part of this floor will be used for mechanical drawing and art work.

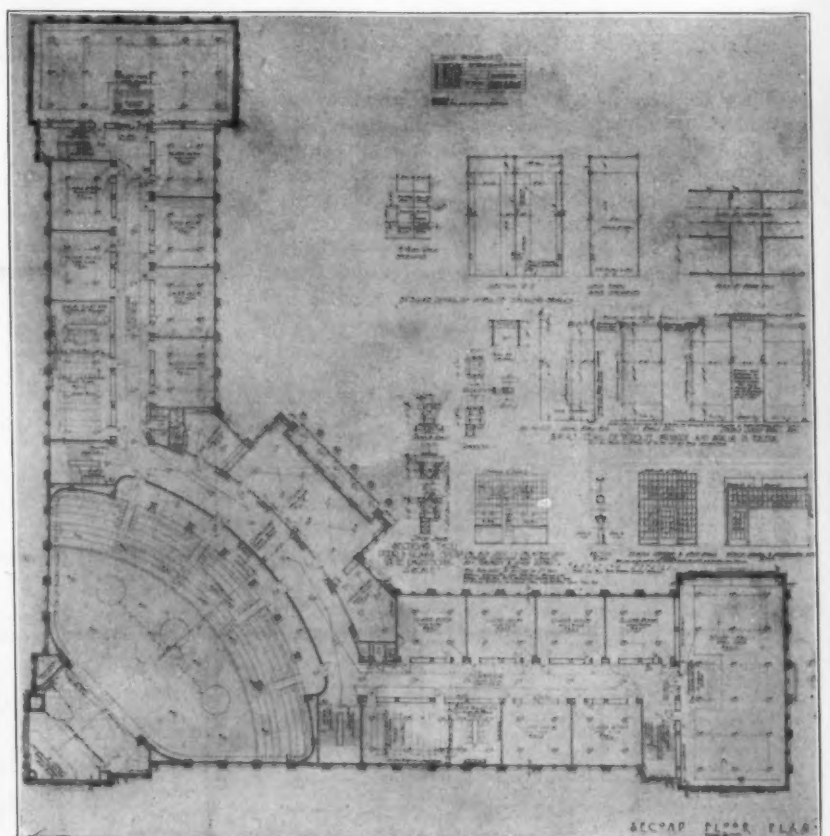
The building is to be of fireproof construction thruout, veneered on the outside with high-grade pressed brick. All corridors are to have composition floors and painted cement wainscoting. All toilet rooms are to be of tile and vitrolite, and the plumbing is to be the best that modern science can devise.

The building is to be heated in winter and cooled in summer with the same system, providing at all times fresh air of the right temperature, and cleaned with a water spray. For cleaning the building a vacuum system will be

(Concluded on Page 67)



THIRD FLOOR PLAN.

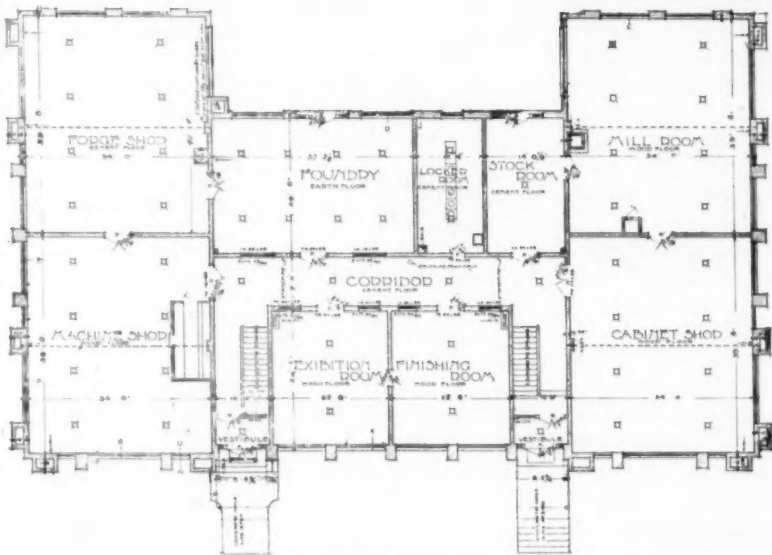


SECOND FLOOR PLAN.

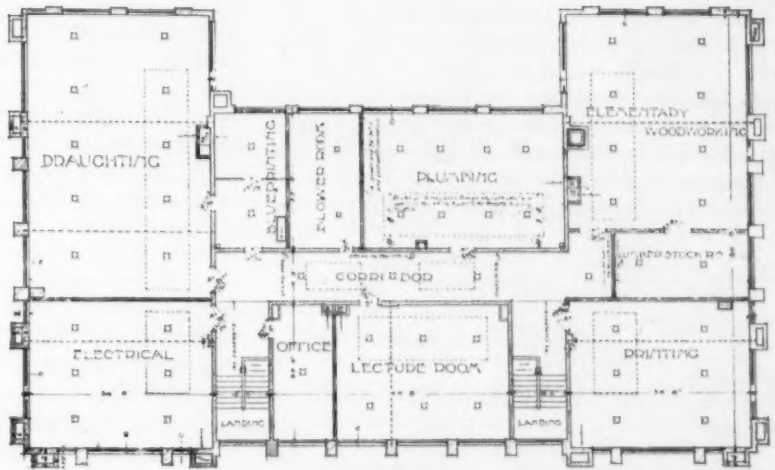




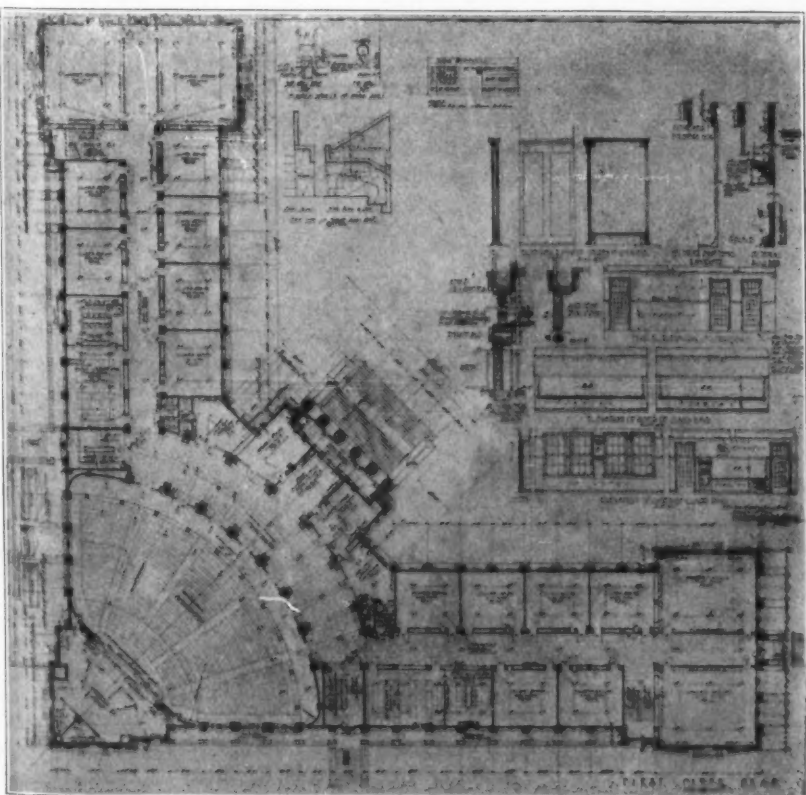
EVELETH MANUAL TRAINING SCHOOL, EVELETH, MINN.  
Bray & Nystrom, Architects, Duluth, Minn. (See page 67.)



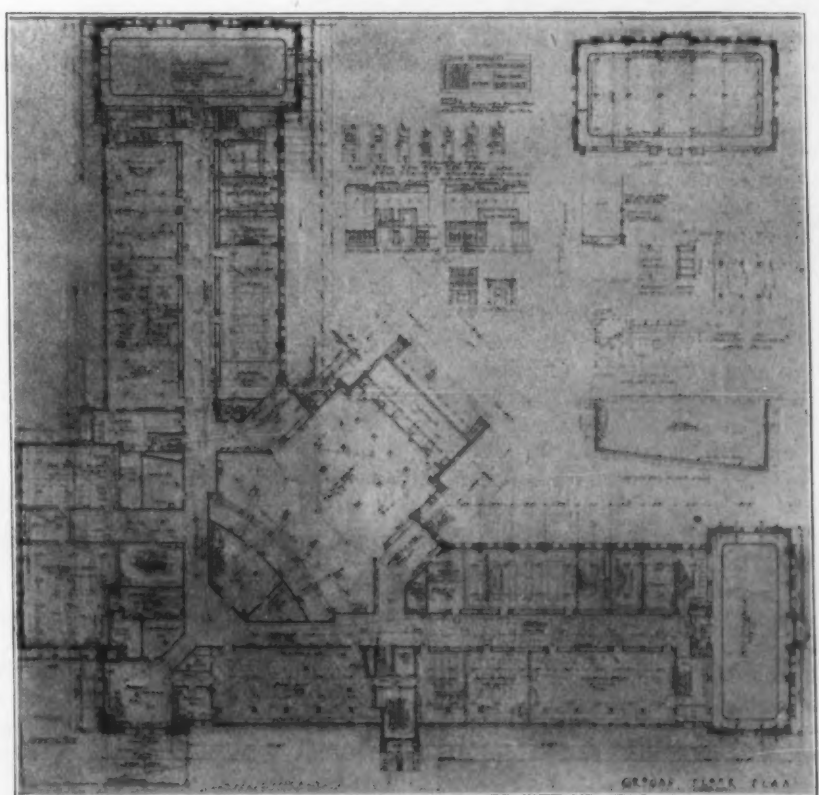
FIRST FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN, EL PASO HIGH SCHOOL



GROUND FLOOR PLAN, EL PASO HIGH SCHOOL



# THE AMERICAN School Board Journal

DEVOTED TO  
Legislative and Executive School Officials  
WILLIAM C. BRUCE, Editor

## EDITORIAL

### ANOTHER LESSON.

It requires a serious object lesson to bring home to school boards the vital importance of fire protection in schoolhouses. The recent tragedy in Peabody, Mass., which caused the death of 21 small children demonstrated again the futility of half measures and the need for fire-stopping construction and equipment, adequate fire escapes and efficient fire drills.

The preliminary findings of the Peabody fire indicate that no particular laws were violated, and no criminal negligence was shown. The janitor was not at his post when the fire broke out—that was the only serious fault in the conduct of the school. Fire drills had been held regularly and with apparent success. When, however, the fatal fire occurred, the children from the third floor broke into the lines from the second floor, and a boy fell at the main door, the ensuing panic prevented the escape of the frantic mass of children piled up in the corridors and lower stairs. The real fault, as we see it, lay not in the school as such but in the laxity of laws which permitted the accumulation of waste in the school basement and which did not require fire and smoke stops as well as a double means of escape.

It appears to us that the fire danger cannot be obviated wholly unless drastic action is taken by all municipalities and all states. Ohio has demonstrated what can be done by a stringent law and Ohio's example ought to be followed by every commonwealth of the union. School boards can, and must, if the members are conscientious, formulate and execute well-thought-out programs for fire protection. Such programs might well call for immediate action looking to

(1) A complete survey of the fire condition of every building and the preparation of an honest, complete statement of conditions as they are found.

(2) The establishment of a complete code of fire drill rules with penalties for neglect on the part of teachers.

The report of a complete fire survey would logically lead to the formulation of a double program for protection, to include (a) immediate changes, (b) the adoption of fireproof construction in all new buildings and (c) a settled plan for a given amount of reconstruction of all old buildings to render them as fire safe as possible.

For immediate changes such essentials as the isolation of basements by means of self-closing fire doors; the installation of fire alarms and fire hose on all floors; the removal of "pockets"; the introduction of hand extinguishers; the removal of all enclosures under stairs and in other dangerous places, and the erection of fire escapes on three-story structures are imperative.

A complete plan for fire protection would necessarily include annual appropriations for the gradual fireproofing of corridors and stairs, the entire isolation of basements and heating plants by fireproof walls and ceilings, the construction of fireproof stair walls and the introduction of sprinklers in basements which cannot be fireproofed.

On the administrative side, it is not difficult to compel the janitor to be at his post during school hours and to remove daily all rubbish

and paper. Similarly, an adequate fire drill based upon a well studied plan is easily operated and enforced.

From the economic standpoint it is difficult to understand the complete indifference of school boards on the question of fireproof construction. The margin of additional cost of permanent, safe construction over common construction has been reduced in many cities to fifteen per cent and, in some cases which have come to our attention, to ten per cent.

In the great majority of buildings, the additional cost is readily covered by the additional life of the building, by savings in repairs and insurance. Certainly, if the protection and the assurance of safety are considered, it is almost criminal not to construct schools wholly of fire-proof materials in all cases.

During the year 1914, there were upwards of 300 fires in the schools of the United States, causing a loss of not less than four million dollars. This amounts to ten per cent of the total value of the new schoolhouse construction in the United States during the same period and tells better than any extended argument the economic necessity of adequate fire protection.

### DR. GARBER ELECTED.

Much satisfaction is expressed in Philadelphia at the election of Dr. John P. Garber as superintendent of schools to succeed the late Wm. C. Jacobs.

Dr. Garber is a native of Pennsylvania and has taught since graduation from the Cumberland Valley Normal School in the Keystone State. In 1885 he became principal of the Kenderdion School, Philadelphia, and from 1897 to 1906 he was an assistant superintendent. Dr. Brumbaugh made him an associate superintendent. His recent election was without contest and was unanimous.

Dr. Garber's educational utterances in books and on the platform clearly indicate that he is a man of wide outlook, with a thoro knowledge of school conditions and administrative methods. His intimate connection with the Philadelphia schools during a period of 30 years will enable him to adopt policies and extend school activities without expensive and fruitless experimentation.

### MILITARY TRAINING.

The notable revulsion of feeling, on preparedness for war, which has become manifest with the progress of the European War, is reflected accurately in the demand for military drill in high schools and colleges. The plausible plea that the United States will be confronted with a condition and not a theory is gaining favor among many educators as well as citizens generally, even tho they are peace advocates and have not receded from the position that universal peace is the ideal toward which the nation should lend its great influence.

It has not appeared to us that military drill will contribute sufficiently to our readiness for an armed conflict to justify its introduction. The manual of arms and the familiarity with the ordinary drill evolutions taught in a school armory are a very small part of the training which a soldier must receive to become an efficient fighting man.

The drill which the real soldier must undergo in the field is too arduous for boys between the ages of 14 and 18 and properly belongs to young men who have well passed the latter age. The European nations seem universally to recognize this for they do not admit military drill in the schools, but postpone it until the age of 19 or 20. Even Germany does not drill school boys.

The argument against military drill is well summarized by Dr. Sargent, on another page of this issue, when he argues that the great need is for soldierly boys, not boy soldiers. Soldierly

boys can be developed better by a system of national physical training which will reach every youth in the schools. Such a system will largely discard the competitive and individualistic, athletic system now in vogue, and will substitute for it abundant gymnastic training, co-operative games, mass field tournaments and open-air sports. Such a system will make every boy and girl fit physically to take up the burdens of every day living and work and—as we hope will not be necessary—the vigors of war.

### A SCHOOL ADMINISTRATIVE PROGRAM.

School reform programs, especially those prepared by school surveyors, fail because they lack definiteness, because they attempt too much, or because they lack saving common sense. Quite a contrast to such programs is that issued in the fall of the present year by Supt. Fred M. Hunter of Lincoln, Nebraska. It is worth reading and re-reading:

"1. The completion of the reorganization of the system of accounting. This should be so shaped that it will be possible to determine almost at a glance the cost of each particular kind of service for each unit of school organization.

"2. A more intensive system of supervision thru: (a) demonstration lessons in individual school meetings; (b) a broadened system of inter-school and inter-class visitation; (c) a more efficient method of supervising and developing teachers new to the system.

"3. Completion of new curricula for high school, junior high school, and prevocational schools, in (a) the development of a cosmopolitan plan for the courses of the high school; (b) a complete system of electives for the junior high schools; (c) a more complete system of subject promotion for the junior high and prevocational schools; (d) a new system of record keeping for prevocational schools and junior high schools.

"4. A more extended and practical use of standard scales and measurements in judging classroom results.

"5. A more thoro study of rates of progress, promotions, over-age, and elimination than heretofore.

"6. A more rigid enforcement of the compulsory attendance law thru strengthening the work of the attendance department."

A little study of this program will show that Mr. Hunter is seeking reform and improvement in many departments of the schools not directly mentioned. He is striving to get at obvious, proximate shortcomings and by correcting these, is reaching beyond and below to many fundamental things.

### CHOOSING THE SCHOOL DOCTOR.

Some erroneous ideas concerning the importance and the function of the school physician are current among school boards. This is well illustrated in the remark of a school-board member who, in promoting the candidacy of an inexperienced young man of rather meager medical and personal ability, said to his associates: "Well, he will only examine the children. It isn't as important, as if he were called in during a serious illness."

The school physician is as important and his service is as valuable to the community and to practically every member of the community, as is the service of the family physician in cases of illness. Primarily, the school medical inspector is a public health official whose duty it is to promote and protect the well-being of the city thru the schools. He is a strong factor in the prevention of disease epidemics, and in the promotion of the general physical well-being of the rising generation. If he understands this phase of his many functions he will guard the sanitary conditions of the school buildings, and promote a higher standard of safety in drinking water, sewage disposal, cleanliness and general sanitation.

But more important than his public health function is the educational duty of the school



doctor in improving the individual physical condition of children. It is well established that he cannot perform his work well unless he is a specialist—broadly speaking—in children's diseases and in those branches of medicine which deal with physical ailments and defects that interfere with efficient mental, as well as physical growth. Eye, ear, nose and throat troubles, deformities of the limbs and spine come well within the range of his everyday duties. So too the detection of mental defects, if not their treatment, may well be expected of him. And not the least, it is his business to advise in the development of a complete, rational system of physical education and to suggest limits for the athletic activities of the secondary schools. Every school inspector's office is confronted daily with problems in social service—the children of the poor, the improvident and the criminal. They deserve his especial attention.

When the present scope of medical inspection and school hygiene are considered in the light of the duties imposed on the school physician, it will readily become apparent that the office is an important one. Certainly, the tyro, the quack and the brokendown practitioner of doubtful standing should not be selected.

#### BOOKER T. WASHINGTON.

The death of Booker T. Washington removes from the American field of education a leader whose work for the negro race can hardly be valued too highly. More than any other man he impressed upon his people that emancipation does not mean freedom from work, that legal equality does not imply economic or racial equality. He made self-respect, industry, thrift, self-control, obedience to authority the basis for removing those characteristics which, more than color, bar the negro from enjoying the rights and privileges to which he is entitled.

Booker Washington was more than an educator; he was a race builder whose work contributed not only to the welfare of his own people but to the entire nation.

#### THE COUNTY UNIT.

The county unit for the administration of country schools by means of a county board of education is based upon the very simple proposition that it allows better uniform educational opportunities for the slower and poorer communities as well as for the more fortunate and wealthy. In practice the correctness of this principle has been proven so universally that it is difficult to understand the opposition to its complete acceptance in all states except those older commonwealths in which the large township unit affords substantially the same benefits.

The county unit involves to our mind no diminution of the democracy of local control



The Trustee's Nightmare.

—Mich. Health Bulletin.

over rural schools. It is true that it dispenses with the great number of directors and does not permit each single, small group of people to run its school according to its own dictates. Just here it should be remembered that the improvement in means of communication—better roads, telephones, automobiles, railroads, newspapers, and rural delivery—have made the county of today but little larger than the township or district of earlier days so far as intercourse of the people, exchange of ideas and expression of public will are concerned. The county board of education and county school administration really involve a broader democracy than the old district plan because they compel equal opportunity for all the people who are a unit under the county government.

The nub of the opposition centers in the fear that the expense of conducting the schools will be readjusted and that the rich farming districts must increase their tax rates. The argument is wholly selfish and in the majority of instances not based upon facts. For, the economy of the county control has not increased school costs but has reduced them. It has removed the too-heavy burdens of the poor districts and has kept those of the wealthy at the same amount, or has increased them so slightly that the difference has not been felt. The county unit of taxation must logically follow the county administration of the schools.

#### MRS. YOUNG'S RETIREMENT.

The Chicago school situation has not been clarified by the announcement that Mrs. Ella Flagg Young intends to retire from the superintendency at the end of her present term. In fact, the possible election of a successor has

injected a further element of uncertainty into the differences between the school board, the mayor, the common council, and the teachers' federation. It has given the city administration another opportunity to interfere in the management of the schools.

Events during the month of December will prove, we think, the turning point in the present intolerable conditions.

#### THE PRESIDENCY OF EDUCATIONAL ORGANIZATIONS.

We are opposed to the manipulation of the elections for the offices and honors within the gift of educational associations for any reason except true merit. The control of nominations by small cliques of teachers and superintendents is as bad in principle as the intrigues of publishers' and manufacturers' agents. For, there is little if any difference in the motive of a commercial man who sees a business advantage in the advancement of a school patron or an author, and in the motive of a schoolmaster who finds that the mutual "boosting" of a small group makes his own position and influence more secure.

Above all we believe that the school official, be he superintendent, principal or college president, who is under fire, should not be raised to the presidency of an organization to save his official position.

Schoolmasters should never bear more than one kind of trouble—that of the present moment. They should not be like the people, whom Edward Everett Hale referred to, and who bear three kinds of trouble—"all they have had, all they have now and all they expect to have."

School efficiency according to most school surveyors is the obtaining of a high percentage of results and the reduction of the percentage of failures, by applying scientific methods.

An educator may be a politician but it is hard for a politician to become an educator.

Educators demand from laymen suspension of judgment and submission to expert opinion in educational experiments. They are not always consistent in suspending judgment themselves or applying expert opinion based upon scientific study. The criticisms of the New York teachers and principals on the Gary scheme show that they are hasty and very human in condemning work that has not been fully developed much less established or evaluated.

The rules of the Allen County (Indiana) Board of Education, recently adopted, include a section which reads: "Any pupil carrying fire arms or other unlawful weapons while at school must be suspended at once by the teacher." And that in the Hoosier state.



French School Children from the War Zone Passing Thru Paris to Southern France.

—McCutcheon, Chicago Tribune.



Just Before Christmas.

—Columbus, O., Dispatch.



# HEALTH SUPERVISION OF SCHOOLS IN A SMALL CITY

Peter Olesen, Superintendent of Schools, Cloquet, Minn.

As a people, we believe in the sacredness of human life and conserve it as the greatest asset of our nation. In making this statement, I am aware that Dr. Bracken, the Health Commissioner of my own State, Minnesota, says that one-half of the deaths of the people of our State are due to preventable diseases, and that the annual economic loss of lives in the United States thru accident, neglect and carelessness, is the exorbitant sum of \$1,500,000,000. I know full well that certain State Legislatures spend more for free remedies for Hog Cholera than they do for the entire State Board of Health. I am also aware that many prosperous and progressive cities all over the country spend from ten to twenty times more for fire prevention than they do for disease prevention. Nevertheless, in spite of many arguments apparently to the contrary, human life to all of us is absolutely sacred. Any and all of us will sacrifice our every interest to save a human life.

If medical experts tell us we are not conserving human life, it is either because we have not been aware of this fact, or that we do not know how to do better. For, let us remember, that nearly all people are what they are, as a result of their early teaching, rather than the product of investigation which they have made for themselves. The former legislator has seen with his own eyes the pecuniary loss resulting from Hog Cholera, and all people have seen for themselves the terrible destruction of fire. It is, therefore, not necessary to prove to them that laws should be made to check the losses resulting from such causes. But many of us, and that includes our lawmakers, whether they be municipal, State or National, know nothing or almost nothing about the insidious working of germ life, the effects of bad air, the prevalence and danger of adenoids or enlarged tonsils. It should not, therefore, be expected that they should appropriate sufficient funds for what has thus far been considered strictly medical and purely private matters. Before they can be expected to legislate effectively on such subjects they must first be brought to see the need of it.

Here the school has a vital mission. Its specific function is to teach the things worth while. The past has neglected the proper teaching of hygiene, and we today are suffering from this neglect. But if we as educators fail today in our duty to emphasize the value of health, the people ten to twenty years hence will continue to suffer from our neglect, just as we are suffering from the errors of the past. Since we ourselves are now fully aware of the need and value of the teaching of hygiene, we should therefore not only teach this to all the children in our schools, thru the textbook, but we should go still farther. Our Boards of Education gladly legislate for the best interests of the schools; they willingly engage special supervisors of music, drawing and penmanship. But Hygiene is of greater importance than any of these subjects. If this be true, it follows as a logical sequence that any school which employs any such supervisor should also have a professionally trained Supervisor of Health.

Three years ago—eager to do its full duty to the people of the State, the State Department of Education of Minnesota, working co-jointly with the Board of Health, looked about for a specialist in medical supervision to come and promote Health supervision in the Minnesota schools. Their choice was Dr. Ernest Bryant Hoag of California. He came, gave us a year of his time, visiting the larger towns and smaller cities of our State.

As this Specialist went from room to room in the various schools, he surprised most people when he proved by actual examination in the different classrooms visited, that fifteen to

twenty per cent of all school children suffered from eye strain; that one out of twelve children had adenoids; that two or three per cent were partly deaf; that eight per cent had diseased tonsils; that forty to ninety per cent had defective teeth; that some suffered from malnutrition and skin diseases.

Now, it is one thing to have a person tell us or to read it in a book—it is another thing to have the facts actually demonstrated before our eyes. While I had read similar figures before this, the need of special health supervision had not impressed itself upon my mind as when I walked from room to room with the California expert. Being exceedingly anxious to give the children of our schools the benefits of his advice, I asked the Doctor to tell our Board of Education about his investigation in our schools, and the real value of health supervision. We also arranged for a public meeting in the High School, where our visitor addressed a number of representative citizens. We wanted him to give his recommendations first-hand to as many patrons of our schools as possible, for the reason that if we were to have medical supervision it would be a new policy for our school; and we were anxious that the general public should be back of the movement when it was established. Our Board of Education at once realized the value of Health supervision. The only question now was, how could it best be done for our city of eight thousand at the lowest cost. We asked ourselves the question, "should we perhaps have medical inspection only, which would mean an examination of all the children once a year, with an occasional special emergency call, or should we engage a school nurse to give all her time to the visiting of homes—or should we have both?" We talked this over very carefully with the visiting specialist, who recommended—what I believe was the best recommendation that could have been made for us—that we secure a full-time woman doctor who had also had some experience as a nurse. In this way we would have a medical inspector and a visiting nurse in one and the same person, at but very little higher salary than that of a visiting nurse.

We accepted his advice. Now the problem was—where could we get the proper person. We realized that we needed a lady with considerable enthusiasm and still more tact, a woman with sufficient experience in life to realize her own worth as well as the needs of the very poorest—a woman who would have a good deal of patience and sympathy for those who most needed her. After corresponding with some ten or twelve leading medical schools, we happily secured a young physician, who was a graduate of our State University. Her final report of the year's work shows that all the children in the grades, about eleven hundred, were examined once, and some several times during the year. Each child in the grades has now on file for reference in the office of the Supervisor, a physical record card, which is a record of the physical and mental condition of the pupil. Another card—a disease census card for all the children, including the high school—was also prepared. Both kinds of cards are filed in alphabetical order and so arranged that they can be kept up to date. A summary of the contagious diseases was made for each school, and the percentage of probable immunity from chicken pox, measles, mumps, scarlet fever, small pox and whooping cough, determined for the school year.

Twenty-four girls of the high-school basketball team were given physical examinations and recommendations sent to the Director. Talks on Hygiene were given to the high-school girls and to the Mother's Club. Forty-four children were vaccinated at school at the request of their parents, many cases of skin diseases were discovered and treated, and about two hundred

cases of defects of the throat were seen. These included enlarged and diseased tonsils, adenoids, and cases of acute pharyngitis. Of these a number had operative treatment by practicing physicians. One hundred and eighty-six children were found to have serious eye defects, including astigmatism and other defects of eyes, blindness of one eye, conjunctivitis and other acute diseases such as ulcer of cornea. Twenty of these were treated during the year by physicians skilled in such work, and many were fitted with glasses later.

It is very often a difficult matter to convince the parents about the seriousness of adenoids and eye defects. A great many people cannot understand that they cause much general disturbance, such as headache, dizziness, nausea and a general feeling of lassitude. Thirty-eight children were found with defects of hearing, due to chronic or acute diseases of the middle ear caused by the presence of hardened wax occluding the auditory canal. One child's auditory canal was filled to the brim, and upon grasping the hardened wax with a pair of forceps, a piece of cotton thoroly impregnated with wax was withdrawn. Upon questioning, it was found that it had been in the child's ear for three months. The presence of this hard foreign body against the delicate drum membrane may have caused very serious damage.

Nineteen children whom the teacher had found listless, tired and disinclined to work, when examined by the Health Supervisor were found to be suffering from chronic heart disease. Many homes were visited and truant sent back to school. Over three hundred letters were sent to parents, and during the first year including the emergency work, such as removing foreign bodies from eyes, injuries, sudden illness, etc., etc., 2,300 cases were cared for.

It was with deep regret that we learned that the lady who had established our work in Health Supervision, would not return for another year. But competent young people are ambitious for professional advancement, and being offered a better paying position in a State institution, she accepted that position. We were, however, again fortunate in securing a mature woman physician, who also loved this work with the children. With great fidelity she too rendered our community valuable service, during the past year.

I have asked our Health Supervisor to give a brief summary of her daily routine. She says: "In the morning between 7:30 and 8:00 A. M. I go to my main office and work till 8:30 in posting the previous day's work. From 8:30 to 9:30 I am in readiness to receive telephone calls from school buildings or parents who may wish to speak with me. From 9:30 to 10:00 I am ready for what may come up in the Garfield Building. A case of pediculosis, headache, toothache, or sore throat may be sent in to me. Of these, the sore throat needs closest attention. It may be tonsillitis or incipient scarlet fever, which must be excluded to prevent contagion in the schoolroom. From two to five absences are reported in the eight rooms. These absentees are called upon in their homes to ascertain if they are too ill to be in school. By 10:30 I arrive at the second building, repeating the work there. In the afternoon, I have the same routine work in the other two buildings. This, as also a sanitary inspection of each of the four buildings, is my daily routine."

A fairly clear idea of her work may be gained from a monthly report, which is typical of the others for this year. It gives daily inspection of the four school buildings, 23 exclusions, two cases of scarlet fever, five of tonsillitis, one of mumps, five of chicken pox, one of whooping cough, eight of pediculosis, one of impetigo, two scabies, one acute conjunctivitis, 62 non-communicable diseases, one defective, nineteen treated, 44 untreated, 44 homes visited, four written reports sent to parents, 29 children re-examined.

The Health Supervisor also worked with the children who were slow and needed extra help and had them transferred to the Special Help Room.

Our School Health Supervisor was of great



## Let the Victor help to make this Christmas season the merriest, happiest Christmas you have ever celebrated.

You can use the Victor in all the rehearsals and can give with our splendid special Christmas records, not only one program, but half a dozen. There are the old, old carols and hymns, the stately choruses and arias of the Messiah Music, the sprightly Santa Claus and sleigh bell songs and the scriptural and modern readings. Then there are the games and folk-plays for the merry-making and the Victor Records will furnish clear and perfect accompaniment for all of them. There are numerous instrumental numbers that will fit into the central thought.

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The Lord's Prayer . . . 16996

Joy to the World (Trinity Choir) . . . 35420

The Life of our Lord—Reading . . .

And the Glory of the Lord } "Messiah"

Pastoral Symphony . . . 70071

I Know that My Redeemer Liveth . . . 35484

"Messiah" (Band) . . .

Hallelujah Chorus "Messiah" . . .

**PAPER**—The Early Christmas.

The First Nowell (Old Carol) . . . 17647

Silent Night (Schumann-Heink) . . . 88138

While Shepherds Watched . . . 35412

Joseph Mine (Old Hymn) . . . 17870

O Bienheureuse Nuit (Normandie Carol) 17868

**PAPER**—The Modern Christmas.

Christmas Day in the Morning . . . 17868

Yule-Tide (Band) . . . 35261

Merry Christmas (with sleigh bells) . . . 17869

Jest 'Fore Christmas—Reading . . . 35350

Babes in Toyland (Orchestra) . . . 60080

The Night Before Christmas—Reading

Drawing of curtain revealing Christmas Tree.

Group of children join hands, circle around the tree, dance and sing "Around the Christmas Tree" (Old Swedish Song) . . . 17869

Sleighing Song (with sleigh bells) . . . 17869

The Christmas Tree (Der Tannenbaum) (Gluck & Reimers) . . . 87229

Six children walk and bow a stately minuet.

Minuet (Mozart) . . . 17087

Coming of the Year (Bells) . . . 16825

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Can you possibly develop so much of the real Christmas spirit, the story of the first Christmas, the Christ Child, caroling, songs of children, the joyous spirit of "Peace on Earth, Good Will to Men" in any other way?

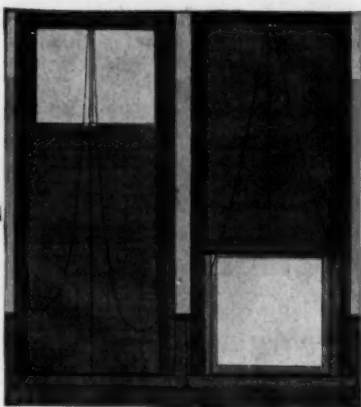
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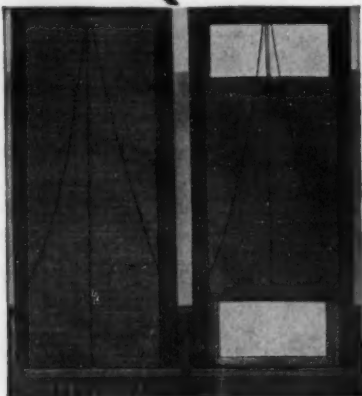
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help in stopping the spread of scarlet fever. When smallpox became epidemic, the Board of Education ordered all unvaccinated children to be vaccinated. Our School Doctor gave 1,328 vaccinations, including the cases that were second and third attempts before they became successful.

All new children were given a thoro physical examination and when found to have physical ailments, which needed medical attention, the parents were notified in writing. All told, during the year which has just closed, over 2,600 cases were given consideration.

But a mere enumeration of numbers will not tell the real value of health supervision. The getting in touch with the homes is of great value to the school and the community. To illustrate—on one occasion the doctor, who also is our truant officer, went into a home, asking why a certain boy was not in school; the mother simply said, "Oh, he does not feel well today." The doctor asked to see him. Upstairs she found the child in bed with his clothes on, having a temperature of 103. Immediately she undressed the child and ordered the mother to get a practicing physician.

At another time the Health Supervisor called on a little girl who was absent from school. The mother was not at home. The elder sister would not let the doctor see the child, but before she could help herself, the child, who liked the Supervisor, came over to her. She found that the child had scarlet fever, a light form, but a well developed case. The parents had failed to call a physician, and here were the child and mother, carrying the worst form of contagion to other people. Of course, the school physician promptly reported the case to the City Health Department and the house was quarantined.

Is health supervision worth while? Looking at it from every conceivable standpoint, there is but one answer: It is worth while. The children form the habit of having their ills, even

their smaller ones which sometimes are the beginning of larger ills, properly cared for. Their reluctance and fear of interviewing a physician is largely overcome, and a friendly feeling is created between the child and the health supervisor.

In making the calls at the homes, the school physician discovers the causes that often prevent a pupil from making proper progress. She often finds that poverty, ignorance, uncleanness, lack of proper food, keep the children physically sub-normal, so that they cannot do their proper work. This calling often detects contagious diseases and prevents children and

even adults from spreading the germs of contagious disease thruout the community.

For a smaller city, of say from four thousand to twelve thousand people, I believe that the full-time woman physician, who will also act as a visiting nurse by calling at the homes and thus also caring for the truancy—offers a good solution of the problem of how to secure efficient health supervision at a small cost.

But be its costs large or small, professional health supervision of schools is essential to public welfare, and it is the imperative duty of all school executives to advocate its introduction and of Boards of Education to establish it.

## THE FLYING DUST OF THE AIR

Jacques W. Redway

The casual investigation of causes which led to the discoloration of a schoolroom ceiling opened to me a field of investigation that has presented many surprises. It has also impelled me to equip a meteorological laboratory for the study of certain conditions of the air that is supplied to living rooms. In my own house, for instance, I found a variety of furnace products, the delivery of which the furnace maker did not guarantee. Among the products which I was not praying for were minute bits of half-charred organic matter which at first I did not recognize. Subsequently, similar matter proved to be horse dung. An examination of the flying dust of schoolrooms disclosed the presence of horse dung in most of them—in every case a part of the street dust which had been carried into the buildings at the intake.

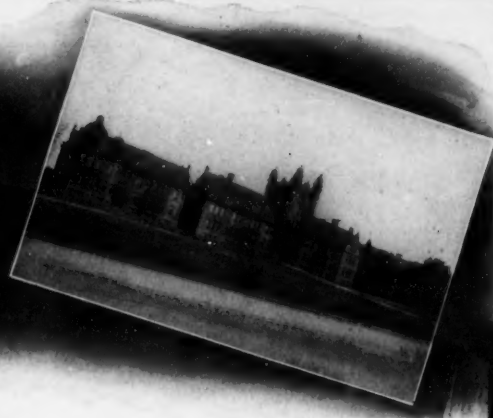
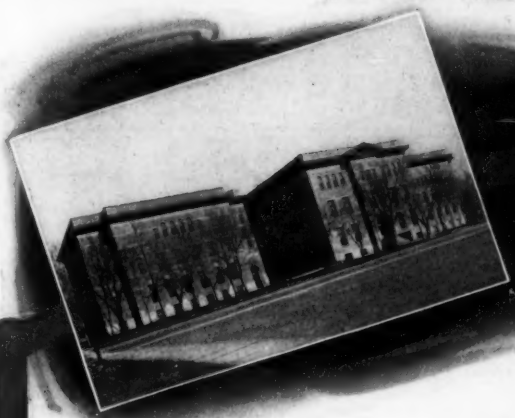
This sort of matter, dropped in the streets, is ground and beaten into minute particles that are easily moved by the wind; indeed, they seem to be blown into the air by a breeze too light

to move earthy matter. In the vicinity of my residence the tarring of the streets has greatly reduced the amount of flying and rolling dust, but the amount of horse dung remains about the same.

In a mechanically ventilated building there is no reason why the air should not be free from such sources of contamination. The air can be screened at the intake, thereby removing practically all the flying dust except such particles that approach molecular sizes. The cost of screening and humidifying the air taken into a mechanically ventilated building is next to nothing. In many of the recently built manufacturing establishments elaborate and expensive machinery for washing and humidifying the air has been installed. Clean, wholesome air adds both to the quality and the quantity of the output.

My investigation of the air of shops and basement stores has not been extensive enough for an authoritative statement in the matter,





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visiting a classroom.

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but nowhere have I found air so nasty as that  
of schoolrooms—nasty as to dust and nasty as  
to body odors. And such a condition is wholly  
unnecessary. Most of the crayon dust and 98  
per cent of the flying floor dust is preventable.  
The cost of screening and humidifying the air  
of a sixteen-room building need not exceed one  
dollar per month. An air washer will cost about  
\$2,500 installed and ready for use. It takes the  
exhaust air at a temperature of 68 degrees in-  
stead of, perhaps, 20 degrees and delivers it  
purified, moistened and warmed. By using  
warmed air, the saving in fuel will pay the cost  
of the washer in the course of a few years.  
Because moist air holds its warmth so much  
better than dry air, there will be a further sav-  
ing in fuel—estimated as high as ten per cent,  
anyway more than three per cent. All that is  
required to make the air of a building as fresh  
and wholesome as that of a June morning is  
intelligent care and watchfulness. The ordinary  
ventilating apparatus is capable of such a re-  
sult.

So far as the injurious effects of flying dust  
are concerned, I am inclined to think that they  
are physical rather than physiological. Bacilli  
may be abundant in street mud but certainly  
not in flying dust, so far as my observations go.  
Colon bacilli may be found in horse dung, and  
Dr. L. B. Goldhorn, bacteriologist of the Mount  
Vernon Hospital, has found that a water supply  
has been infected thereby; indeed, horse dung  
in the form of flying dust may become a posi-  
tive menace.

But clean, wholesome air is within the reach  
of every schoolroom, and when the air delivered  
to the room discolors the walls, it is high time  
that the professional kicker of the school board  
gets busy. It is also an incident that demands  
the investigation of the repairs committee, su-  
perintendent, principal, and janitor.

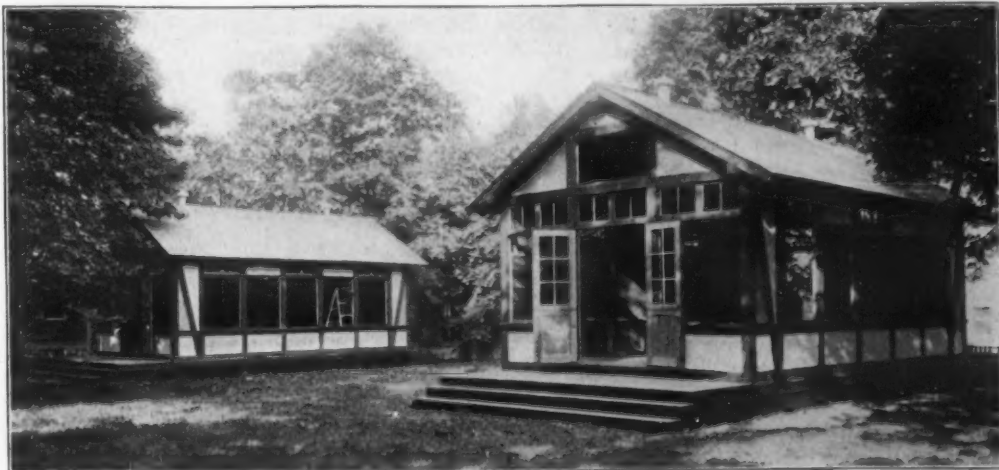
### RECENT SCHOOL DECISIONS. Compiled by Donald L. Morrill of the Chicago Bar.

*Iowa.* Reading of the Bible in any version  
in the public schools and reciting the Lord's  
Prayer is not prohibited by law. Such is the  
construction placed by the court upon Sec. 2805  
of the Code which provides that the Bible shall  
not be excluded from any public school nor shall  
any child be compelled to read it contrary to  
the wishes of its parents. Under another sec-  
tion of the Code which empowers school boards  
to rent a room or building in which to main-  
tain a school, it is held the board has the right  
to rent any suitable place and it is no objection  
that the room rented is in a parochial school.  
The sale of an old school building and the rent-  
ing of rooms in which to maintain a school is  
not a matter for the courts. Such a change  
rests in the discretion of the board of educa-

tion and the only remedy, if any, is by appeal  
to the county superintendent. — Knowlton v.  
Baumhover, 153 N. W. 1020.

*Kentucky.* Sec. 4464b of Kentucky Statutes  
relating to the extension of the territory of  
graded school districts is held to be constitu-  
tional and to completely repeal Secs. 4464 and  
4464a which had theretofore prescribed the  
method of changing boundaries. — Hume v.  
Grant, 178 S. W. 1028.

*Michigan.* Public Acts, 1905, No. 187, Sec. 2,  
provides that in order to acquire the benefit of  
the security given by the principal contractor,  
a subcontractor shall give notice in writing to  
the board of officers, before payment is made,  
that he relies upon the security of the bond of  
the principal contractor. In construing this  
statute it is held, in an action against a con-  
tractor's surety for terra cotta furnished in the  
construction of a school building, that notice



That health and sunlight are as good for well boys as they are for boys who have become afflicted with the dreaded  
disease of tuberculosis, is to be proven by a practical demonstration in an open-air school near Boston.  
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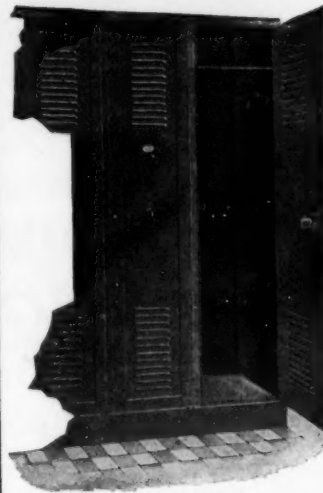
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given after most of the material in question had been paid for is sufficient inasmuch as more than the total cost of the material still remained unpaid upon the principal contract. Furthermore, the surety cannot complain of failure to give timely notice to the Board of Education when it failed to show injury to itself as a result thereof.—People v. Traves, 154 N. W. 120.

*New York.* It is provided by the Code of Civil Procedure and by the General Municipal Law that a taxpayer may maintain an action against any officer to prevent waste of or injury to the property of the municipality. Such an action, however, lies only to prevent illegal or dishonest acts on the part of officials and not to review the wisdom or advisability of their acts; thus a court will not pass on the question of whether a certain ventilating system about to be installed by school commissioners is adequate. Sec. 120 of the Second Class Cities Law creating a board of contract and supply for such cities is not in conflict with Chap. 137 of the Laws of 1842 which provided for the election of six commissioners of common schools in such cities and defined their powers and duties, because the former statute lays the duties upon the board of contract and supply with the limitation "except as otherwise provided by law." Consequently it is within the power of the commissioners to buy and install a ventilating system. Specifications should indicate in detail what work is to be done and specifications issued by school commissioners which simply state that a certain system of ventilating is to be installed in a school building, and bidders should submit plans and details, are improper.—McBride v. Ashley, 154 N. Y. S. 1010.

*North Carolina.* Where the boundaries of a school district are changed by a statute which is to "take effect from its ratification," the territory excluded from the original district is not discharged from its duty to pay school taxes which had accrued and become due during the

time that such territory belonged to the original district, and under a further provision of the same statute authorizing the tax collector to collect arrears of taxes, the tax collector may seize and sell property to satisfy such arrears.—Marsh v. Early, 86 S. E. 303.

*Oklahoma.* Where there is an irreconcilable conflict between two statutes the last expression of the Legislature must prevail. Hence, Sec. 8050 of Snyder's Compiled Laws providing that on questions affecting the alteration or formation of school districts an appeal may be taken from the County Commissioners to the district court is abrogated by Chap. 107 of 1910 Session Laws which provides that on such questions the decision of the County Commissioners shall be final. Such a denial of the right of appeal from a decision of a ministerial board is not unconstitutional.—School Dist. No. 7 of Johnson Co. v. Cunningham, 151 P. 633.

*Oklahoma.* A county superintendent attempted to create a new school district by detaching a portion of an existing district without complying with the statute requiring that such a change could not be made except on petition of one-third of the qualified electors of the existing district. The new district proceeded to employ teachers and provide for a school. A short time thereafter the district was re-created according to law and then refused to honor salary warrants which it had previously issued. The plaintiff maintained in a suit on one of these warrants that the district had a de facto existence and its acts were valid. It was held the acts of the district as first organized were void and could not bind either the district or others dealing with it; that in addition to a law under which a corporation may organize there must be a professed compliance with the law. Here there was not even a colorable attempt to comply with the requirements of the statute.—Cleveland v. School Dist. No. 7 of Grady County, 151 P. 577.

*Oregon.* Buying a new site on which to erect

a new school building is not a "removal" within the meaning of the statute which requires a two-thirds vote of a legally called school meeting to order the removal of a schoolhouse and a majority vote of such meeting was sufficient to authorize the purchase. For the reason that a remedial statute should be freely construed to give it practical effect, a statute giving school boards the right to incur indebtedness when authorized by a majority vote of the electors will be construed to give the directors the right to levy a tax to satisfy such indebtedness. A notice announcing that a vote will be taken on the question of authorizing the board to contract a debt by negotiating interest bearing securities is sufficient notice to voters that a tax will be levied in case such securities are issued.—Landers v. Van Aukin, 151 P. 712.

*Oregon.* The question of whether a district boundary board created by the Legislative Assembly has authority to change the boundaries of a school district under the new constitution of Oregon arose recently. The constitution provides that initiative and referendum powers are reserved to the legal voters of every municipality and district and no charter of any municipality, city, or town may be amended or repealed by the legislature, but only by the legal voters of the particular corporation. The court considered but did not determine the question of whether a school district is to be regarded as a full fledged municipal corporation and decided the case on the ground that the constitution had been adopted after the passing of the constituting act under which the school district was created and by this constituting act the control of boundary lines was committed to the district boundary board. The board, having once been created, simply administers and does not amend the law under which the district exists and the change of boundary may be made without submitting the matter to the electorate.—School Dist. No. 35 of Tillamook Co. v. Holden, 151 P. 702.





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### TEACHERS AND CHRISTMAS GIVING.

A school board may well hesitate before an attempt so seemingly inhuman as to diminish the joys of childhood and yet, last year, our Board of Education seriously debated the question of restraining the benefactions of several enthusiastic volunteer agents of Santa Claus and our reasons for it were three.

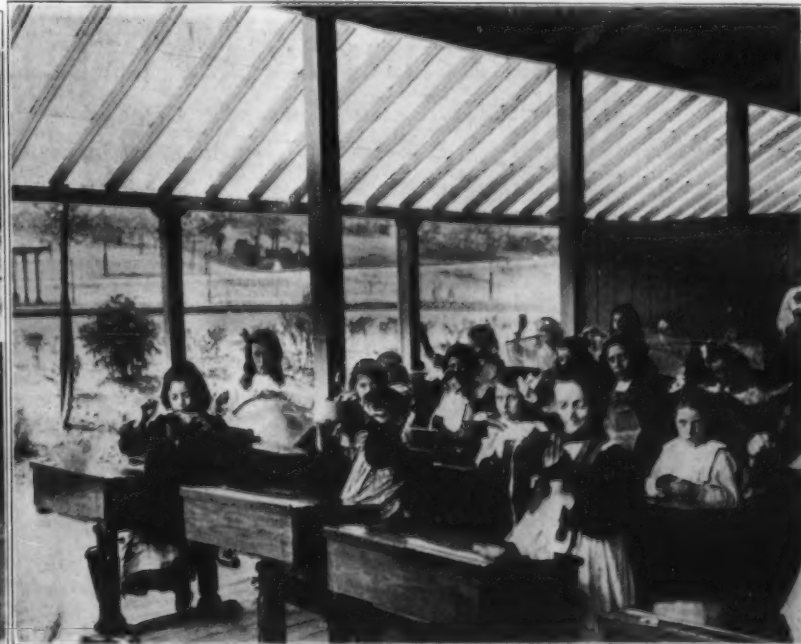
It is most natural that at Christmas time teachers should wish to give some little gift to each child: an orange, a card, a candy cane. It pleases the children, pleases the teacher and most teachers can well afford to indulge them-

selves in this pleasure. The trouble is all of them can't. We had at least one who saved every possible car fare and ought to have saved it. A dollar for gifts for her children would have been an extravagance, which could have been justified only by the pressure of competition. Yet she planned to share in the campaign of giving, where, as in most other competitions, the standard was set by the most ruthless. For that one day, the most popular teacher was she who gave most lavishly.

A second objection was that after all, to four-fifths of the children in any room, these gifts

would probably mean very little, a mere drop in the Christmas bucket. Why not concentrate, we asked, on the remaining fifth? And this objection, it may be added, was answered thru the co-operation of one of our local charity organizations.

The third criticism was that a teacher's gifts are apt to stimulate, properly enough doubtless, a desire to reciprocate, which sometimes means a hounding of delinquents by zealous juvenile promoters and possibly an ultimate degeneration of the Christmas exchange of gifts into a sort of holiday barter.



AN IMPROVED OPEN-AIR SCHOOL BUILDING, SWANSEA, LONDON, ENGLAND.

The direction and quantity of light for open-air schoolrooms have afforded problems which architects have but indifferently solved. In a new open-air school in Swansea, London, large glass covered platforms have been arranged along the two open sides of the classrooms. These make it possible to keep the rooms open under all weather conditions. Much of the light comes from above, thru the half-clear roof glass. The platforms are used for play on rainy days.

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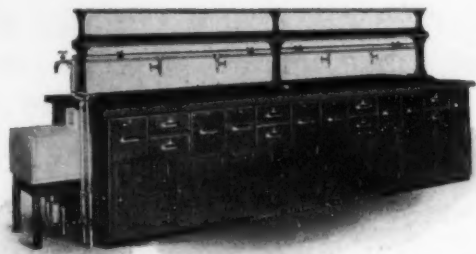
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Our board, however, was not the first to see these objections and our final non-interference was largely because the teachers themselves worked out a better plan.

The names of all the pupils (and the teacher) in any one room were written on slips of paper and placed in a box; then each drew out one name and to that one the drawer must make a present when the room had its tree. No present must cost over ten cents (or in some rooms five cents) and in the few cases where even this small amount was not easily forthcoming the teacher tactfully found means to supply the needed capital. This plan was not a tax upon

the resources of either teacher or pupils and it was strictly co-operative and democratic, the pupils could rightly feel that it was their own and each could have a share in the joy of receiving and the greater joy of giving.

As to the tree, one may be made to serve several grades, if placed in a room where it can be used by each in turn. The lower grades only are likely to be especially interested in such a celebration. Older pupils are apt to be too grown up, too sophisticated or too much occupied with the Sunday School celebrations to be greatly concerned over a Christmas tree held in the schools.

their bones, heart, lungs, liver, etc., were more matured and developed. Recruits of eighteen show physical immaturity which results only too frequently in their ending in the hospital or being discharged as invalids. Recruits of 18 require two years' special training before they are fit for military training.

"2. It does not offer sufficient opportunity for the development of the individual's power of muscular and mental co-ordination and the exercise of judgment under unusual and trying circumstances.

"3. It does not offer sufficient opportunity for struggle, which requires and develops a spirit of co-operation and self-sacrifice, loyalty and a strong will.

"4. The most military nations in the world do not have their military drills in their schools, but give military instruction and training only after the boys have reached 18 or 20 years and have received years of physical training as a part of their schooling.

"5. The same qualities that are of most value for war are of most value in peace. Military drill also is inadequate as a preparation for the struggles of peace, such as are necessary to sustain the place of the individual or nation in the pursuit of science, politics, commerce, etc.

"6. Military drill in the schools cannot teach boys the real art of war, since they are too young to handle the real weapons and undergo the rigors of adequate instruction. Hence it is apt to foster a bombastic military spirit of 'tin-soldierism' and a false sense of patriotism which does not appreciate the seriousness of war nor the glories of the struggles of peace.

#### A Rational Physical Training.

"IV. A rational system of physical training in the schools and colleges would be of the greatest value in preparing the youth of the country—both boys and girls—for the struggles of both war and peace; because:—

"1. The development and functioning of both the mental and moral attributes is dependent upon and limited by the health and vigor of the individual.

"2. Physical training in the schools would be training at the formative and most critical period of life, just when it is most needed and able to produce the best and most lasting results.

## Military Training in High Schools

Views of Dr. Dudley A. Sargent, Cambridge, Mass.

A clear and complete statement of the dangers of military drill in high schools was presented recently by Dr. Dudley A. Sargent, director of physical training in Harvard University, to a Massachusetts commission that is investigating the problem of military preparedness. The statement will be of service to school board members who are considering the possible introduction of military drill in high schools. Said Dr. Sargent:

"I. Let us consider first what are the fundamental requirements of modern war as regards the men and women of a belligerent country—

"(a) Health and vigor of its people, and the knowledge of how to maintain it under both favorable and adverse circumstances.

"(b) Mental acumen and bodily and mental control under trying circumstances.

"(c) A courageous and generous spirit that will fight for what it believes is right for all it is worth.

"II. How near do we come in this country to fulfilling these conditions?

"(a) The most of our children are not trained and developed physically as they should be, while a few are over-trained and enjoy the special attention of instructors and the use of facilities barred to the many.

"(b) Mental acumen as regards physical activities is not developed as it should be for lack of the opportunity for its expression.

"(c) The moral qualities of courage, co-operation and self-sacrifice and the fighting spirit, in its broadest and best sense, are not developed as they should be for lack of wholesome and properly directed means for their expression, except again in the case of the favored few.

"III. Does military drill in the schools develop those qualities in youth which prepare a nation for the struggles of war, to say nothing of those of peace? No, because:—

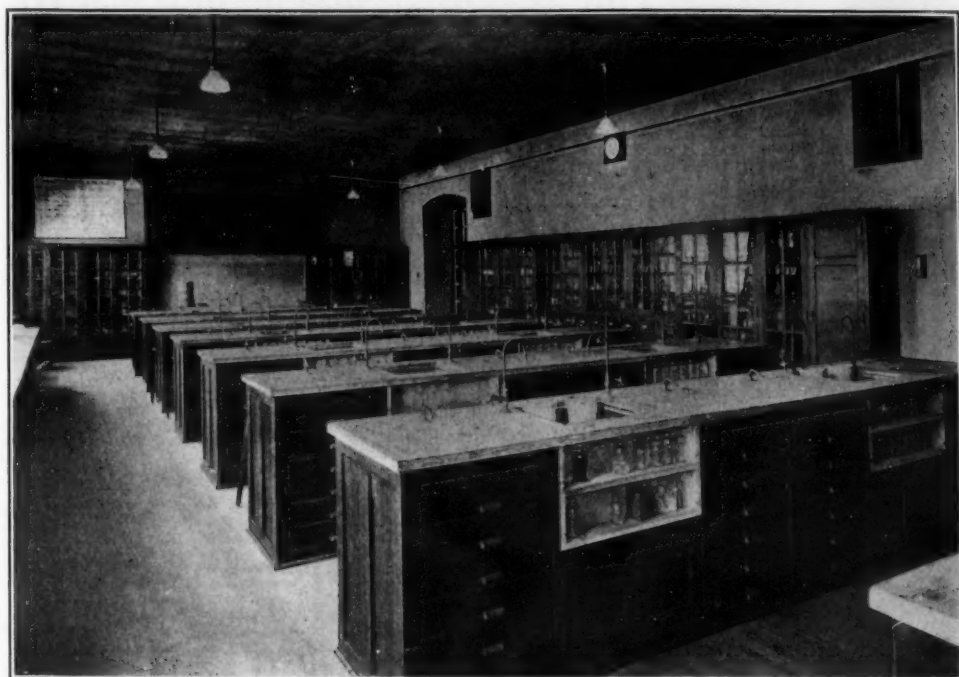
#### The Harm Done to Boys.

"(1) It is not an adequate means for physical training, being not only very limited in its activities, but actually harmful in its effect on boys less than 18 or 20 years of age. The musket is a one-sided implement, too heavy for young boys and inefficient and harmful for older boys. Sir William Altkin, professor of pathology in the army medical school of England, in his book, 'The Growth of the Recruit and the Young Soldier,' says that boys given military training at 18 make soldiers who are less robust and efficient than men with whom this training was deferred a few years, remaining in civil life until after



# Thirty-five Years' Experience

A beautiful school building is a credit to any Board of Education. Architects are co-operating and doing everything that human ingenuity will permit to make the schools of this age both safe



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and sanitary, employing experts for the different classes of work, that you may have a perfect building. But, all this effort profits little if your building is not properly equipped on the inside, that your teachers may be able to do their work efficiently.

If thirty-five years' experience is worth anything to you, if you can use expert advice with reference to equipping your chemistry, physics, biology, cooking, sewing, or vocational departments, write to

## Grand Rapids School Equipment Co.

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"3. By this means not only would the stature be improved in size and carriage, but all the vital organs—heart, lungs, liver, etc.—would be developed and brought into condition to undergo the rigors of real military training in camp or barracks if necessary.

"4. Furthermore, the boys and girls would learn how to take care of themselves under adverse circumstances and apply the laws of hygiene, instruction in which is, of course, an important part of any adequate system of physical training.

"5. An adequate system of physical training includes athletic sports and games, and general gymnastics under competent direction. In these activities—and in this way only—is an opportunity offered for the exercise of the same physical, mental and moral qualities which are of fundamental importance in war. I refer to presence of mind, courage, self-sacrifice and the desire to struggle for a cause which is believed to be right. Physiologists have recently shown that the whole bodily tone and functions are different according as the individual's emotions are those of quiet rest or active struggle. To exercise these various functions in preparation for the struggles of war or peace, contests must be provided. Hence we have a new reason for promoting the plays and games of the playground, schoolyard and athletic field.

### The System in the Best Prepared Countries.

"6. The countries whose armies in this war are found best prepared do not give military drill in their schools. On the contrary, they give abundant instruction in physical training. As illustrating the interest in physical training, independent of the schools, in Germany alone, in 1909, in 7,174 cities and towns there were 8,607 gymnastic societies with a total membership of 902,910, and an active membership of 416,861, an active junior membership of 150,332, and an active female membership of 49,827. On January 1, 1914, the total membership was 1,486,320. It is easy to see at what advantage the German military authorities worked with such a nucleus in addition to their regular army. On the other hand, once England's small army of regular troops—than whom there are none finer in the world—had gone to the front she found herself faced with the herculean task of training a cit-

izen army. She has been at this for over a year and is still at it, trying to do in a few months what Germany and France and Switzerland have taken years of gradual and consistent training to accomplish.

"Conclusion: Upon the foundation of a healthy and vigorous youth can be laid the technical training for peace or war which is necessary for the successful nation of today. Let abundant instruction in military science be given in our colleges, technical schools, military camps, forts, etc., to all who are otherwise qualified and willing to undertake the responsibility of being officers; and provide the means for developing and selecting regular army officers capable of commanding such enormous numbers of troops as enter into modern warfare. Further provide—either in co-operation with or entirely under the federal government—training camps for citizen soldiers, but do not attempt to make a soldier out of an undeveloped boy. For instruction in camp life, first aid, signaling, and the many valuable but easily forgotten things to be known by a good soldier, why not promote the Boy Scout movement, a movement started by an experienced soldier who knew England's needs in the Boer war?

### Educational—Gladiatorial.

"In the summer of 1908 I visited Frankfort, Germany, and saw 25,000 men, women and children doing mass exercises in the field, before perhaps an equal number on the benches.

"I went back to London a week later and saw the close of the Olympic games, at which there were 25 men performing on the track and field and perhaps 100,000 spectators on the benches.

"The former represents the survival of the Greek type, the latter the decadent Roman period. One was educational, the other was gladiatorial and spectacular.

"The scene at Frankfort shows us very plainly why Germany has so many men prepared for service, and the scene at London shows us why England has some million or more men at the training camps which she is trying to get into condition.

"What America most needs is some way of giving those physical advantages to the masses which she now lavishes on the favored few—some way of providing more athletic students

and fewer student athletes, some way of providing more soldierly schoolboys instead of school-boy soldiers."

### THE N. E. A. CONTEST ON RELIGION IN EDUCATION.

Thru the generosity of a resident of California, and in connection with the Panama-Pacific International Exposition, the National Education Association was recently able to offer a prize of \$1,000 for the best essay on "The Essential Place of Religion in Education with an Outline of a Plan for Introducing Religious Teaching into the Public Schools." The essential points to be observed were "A Heavenly Father Who Holds Nature and Man Alike in the Hollow of His Hand"; the commandment of Hillel and Jesus of Nazareth, "Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind, and thy neighbor as thyself"; the high ethical teachings and spirit of service and sacrifice indicated in the Sermon on the Mount.

As a result of the announcement which was made in December, 1914, 1,381 persons representing every state in the Union except one, entered the contest. The essays were limited to ten thousand words in length, and 432 essays were filed previous to June 1, the closing date. These essays were then read by five preliminary sets of judges before the selections were passed upon by the final Board of Judges. This board consisted of:

Adelaide Steele Baylor, State Department of Education, Indianapolis, Ind.; William T. Foster, President, Reed College, Portland, Ore.; Louis Grossman, Principal, Teachers Institute, Hebrew Union College, Cincinnati, O.; John E. Phillips, Superintendent of Schools, Birmingham, Ala.; Thomas E. Shields, Editor, Catholic Educational Review, Professor of Education, Catholic University of America, Washington, D. C.

The prize offered was awarded to Charles E. Rugh, Berkeley, Cal.

Special mention was given to the essays presented by:

Laura H. Wild, Lake Erie College, Painesville, O.; Francis V. Frisbie, Wilkes-Barre, Pa.; Clarence Reed, Palo Alto, Cal., and Anna B. West, Newburyport, Mass.



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The cut above shows glass being broken to give access to the lever operating combined drill and fire department signals, and the cut below shows this lever being pulled.



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### THE SALT LAKE SURVEY.

Survey reports of the type of that recently issued in Salt Lake City are evidence of the true worth of school surveys conceived and completed in a fair spirit, and with a true purpose of helping the school officials, the teachers and the people of a city. Such studies of school systems, as Dr. Cubberley points out on a subsequent page of this issue, discover one or more essentially wrong conditions thru which progress is hindered and point a way to correct them.

In the case of Salt Lake, the finding that the school administrative organization is radically defective will interest school boards more than the hundreds of detailed findings on particular aspects of instruction and management.

The report says in part:

The board of education has provided, under its rules and regulations for the appointment of five standing committees, each consisting of five members and the president of the board. These standing committees are (1) Rules, (2) School Law, (3) Teachers and School Work, (4) Building and Grounds, and (5) Finance. \* \* \* \* \*

The first two committees are not especially important ones, but the other three are committees which transact a large amount of business and assume many important functions.

The board has further organized the administration of the school system under three separate and distinct departments. These are (1) the clerical and the purchasing department, in charge of a School Clerk, (2) the building department, in charge of a Superintendent of Buildings, and (3) the educational department, in charge of a Superintendent of Schools. A Treasurer is also appointed, to care for and pay out the school moneys.

\* \* \* \* \* As far as could be ascertained \* \* \* \* \* these three departments seem to be on a plane of theoretical equality, each handling the business within its own field somewhat independently of the other two. The School Clerk works largely

thru the Committee on Finance, the Superintendent of Buildings largely thru the Committee on Buildings and Grounds, and the Superintendent of Schools largely thru the Committee on Teachers and School Work. These committees then report to the board of education, which serves as a co-ordinating body for the three separate administrative departments and the three important board committees. In effect, three separate boards exist, each large enough to be a board of education in itself, and each handling an important division of the educational work of the city. To harmonize results the three boards meet together as a body, after they come to independent decisions.

\* \* \* \* \* The constant tendency under such a system of administration is for the committees to become very important administrative bodies, and for the chairman of each to usurp some or many of the functions of the executive heads of departments. Especially is this likely to prove dangerous in the case of the Committee on Teachers and School Work, the chairman of which is very likely, almost unconsciously, to take over many of the functions that properly belong to the Superintendent of Schools and to become, as it were, a second head of the education department.

The present organization is not only wrong in principle, but it is fraught with continual danger of misunderstandings and trouble. The committees are too prominent in the administration, and the school clerk and the superintendent of buildings enjoy too large independence in action. An examination of the printed annual reports of the board for a number of years past would seem to indicate that the school clerk is the real head of the school system, rather than the superintendent of schools. His reports come first and are the most elaborate, and he rather than the superintendent of schools discusses the question of finances and says what he thinks as to possible economies. \* \* \* \* \*

One gets the idea from reading a few years of the annual printed reports and the rules and regulations of the board that the educational department of the Salt Lake City school system occupies a rather inferior position in the admin-

istrative organization, and that it is allowed to exercise but little supervisory control over the other administrative departments. Only the compulsory attendance work is specifically placed under the direction of the superintendent of schools. The underlying theory seems to be that the educational department is a separate and isolated department instead of being the premier department of the whole system.

\* \* \* \* \* A thoroly fundamental principle in all proper school organization and administration is that there should be a real unity in the organization and a responsibility to one head in the administration, and that the head of the school system should be no other than the superintendent of schools. Thru him, as the head of the school system, the board should work. The educational department is not a minor or subordinate or even a co-ordinate department, but is the one for which all the others exist. All forms of administrative machinery, and all officers of control and department heads, exist for the prime purpose of assisting the educational department to get teachers and children together under the best possible educational conditions. Some departments have, in addition, as one of their important purposes that of saving money for the educational department, and of deflecting as large a percentage as possible into the work of actual instruction. Every overcharge detected by the clerk, every dollar saved in the purchase of supplies, every economy effected in the erection or repair of school buildings, is added money for increasing the effectiveness of the instruction in the schools. The only excuse for having a clerical, purchasing, or building department is that such may serve the educational department.

In all well organized school systems this relationship is clearly recognized, and these officials work under the direction and report thru the superintendent of schools. The board then deals largely with the superintendent, and holds him responsible for results and efficient service. Whenever the superintendent is not able to secure these, or to retain the confidence of the board of education as a body, the board should consider a change in its executive head. It should not retain the executive and take his work away from him.



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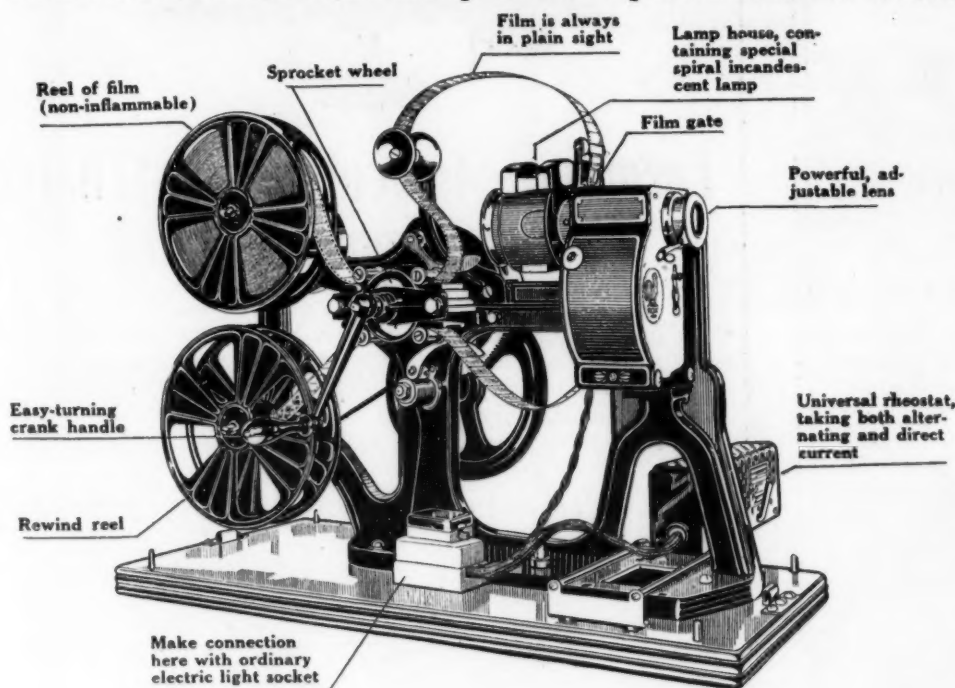
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## Minnesota Schoolhouse Construction Code

(Concluded from November Issue.)

### X. Heating and Ventilation.

**Sec. 40. Capacity of plants:** 1. All heating plants, including both direct and indirect radiation, must be of sufficient capacity to maintain a uniform temperature of seventy (70) degrees Fahr. in all schoolrooms when the outside temperature does not fall below -20 degrees Fahr. (twenty degrees below zero). Standard temperature of all schoolrooms shall be not more than sixty-eight (68) degrees Fahr., nor less than sixty-five (65) degrees Fahr. In corridors and coat rooms the temperature shall be maintained at not less than sixty (60) degrees Fahr.

2. A system of ventilation shall furnish not less than thirty (30) cubic feet of air per minute for each person that the room will accommodate in accordance with the rules governing seating capacities of rooms. The capacity of a gravity system of ventilator shall be subject to test in accordance with this provision only when the difference of temperature of the outside air and the air of the schoolrooms shall be forty (40) degrees Fahr. or more. Ventilation systems in connection with ventilating room heaters shall be subject only to the provisions hereinafter stated in sections 49-57. Study rooms not occupied continuously to their full capacity shall be subject to such modifications as may be approved by the Commissioner of School Buildings, but in no case shall a system be approved which does not renew the air at least four times per hour. Assembly rooms must in all cases be provided with mechanical systems of ventilation which will renew the air at least four times per hour.

**Sec. 41. Direct-indirect ventilation:** The direct-indirect system of ventilation must not be installed in any schoolroom. By "direct-indirect" is meant the introduction of cold air from outside the building at the base or upon any part of a "direct" radiator.

**Sec. 42. Rotation of air:** Return ducts providing for reheating schoolroom air are prohibited unless the air is passed thru an air washer of approved design. Provision in such case must be made for the introduction of at least twenty-

five (25) per cent of outside air to be mixed with the washed air.

**Sec. 43. Ventilation of coat rooms:** Ventiducts must be installed in all coat rooms adjoining schoolrooms. Schoolroom air may be wholly or partly vented thru coat rooms. Coat rooms separated from schoolrooms must be equipped with heat and vent ducts in the same manner and according to the same rules as schoolrooms, or ventilated by means of an exhaust system, on a basis of complete change of air not less than once every ten (10) minutes.

**Sec. 44. Ventilation of laboratories, domestic science rooms and toilets:** Ventiducts from hoods in chemical laboratories, from domestic science rooms and from toilet rooms, shall extend independently thru the roof of the building. Each duct shall be equipped with an aspirating coil, or an exhaust fan.

**Section 45. Ventiducts:** All ventiducts must be continuous thruout their entire length, and must lead directly thru roof, or to ventilator, if several flues are combined.

**Sec. 46. Registers:** All registers shall have an area of not less than one hundred twenty-five (125) per cent of the cross section area of the flue. In schoolrooms heat registers shall be placed about eight (8) feet above the floor. Vent openings may be without registers.

**Sec. 47. Floor registers:** Floor registers may not be installed in any school building, but heat registers in coat rooms may be placed eight (8) inches above floor.

**Sec. 48. Foot warmers:** So-called foot warmers are not recommended, but if installed no register shall be placed in the floor. Registers will be permitted in the walls with edge at floor level, or on sides of seats.

### XI. Ventilating Room Heaters.

**Sec. 49. Capacity of:** No room heater shall be deemed adequate unless it shall conform to the following standards:

1. For rooms of six thousand (6,000) cubic feet or less, the grate area shall be not less than one hundred eighty (180) square inches.

2. For rooms of six thousand (6,000) to eight thousand (8,000) cubic feet, the grate area shall be not less than two hundred ten (210) square inches.

3. For rooms of eight thousand (8,000) to ten thousand (10,000) cubic feet, the grate area shall be not less than two hundred forty (240) square inches.

**Sec. 50. Pattern of:** Ventilating room heaters must be of approved pattern of the upright type without rims or projections which will in any way interfere with the free circulation of air inside the shield.

**Sec. 51. Shield:** The shield must entirely surround the heater and no part thereof shall be less than six (6) inches from the radiating surface of such heater. In no case shall the lower edge of the shield be more than fourteen (14) inches, nor less than eight (8) inches from the floor. It must, in every case, extend above the highest part of the radiating surface of the heater. It must be constructed in such a manner that no perceptible amount of heat may be radiated from it. Shields may not extend to the floor, and perforations or partial openings at the base of the shield will not be accepted in lieu of its elevation from the floor.

**Sec. 52. Fresh air intake:** The fresh air intake for all schoolrooms not exceeding ten thousand (10,000) cubic feet shall be not less than one hundred seventy-five (175) square inches cross section area, and must be constructed to prevent the cold air from dropping down and spreading out over the floor. No intake pipes of this dimension shall exceed six (6) feet in length. Longer pipes must have such increased area as may be specified by the Commissioner of School Buildings.

**Sec. 53. Foul air flue:** The foul air flue shall conform to either of the following standards:

1. Single flue for smoke and foul air.

Where a single flue is used for both smoke and foul air, the inside dimensions of the flue shall be 16x16 inches clear on the inside thruout its entire length, and shall be provided with an approved mixing chamber in order to insure a maximum of ventilation from the waste products of combustion. This requirement shall apply to all rooms not exceeding ten thousand (10,000) cubic feet.

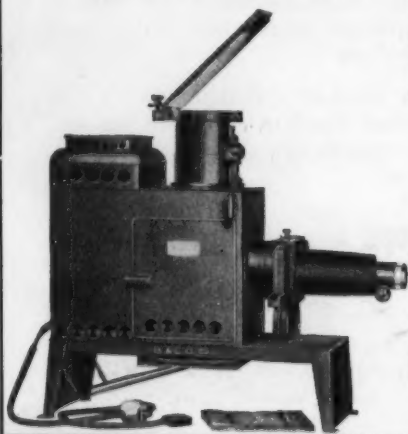


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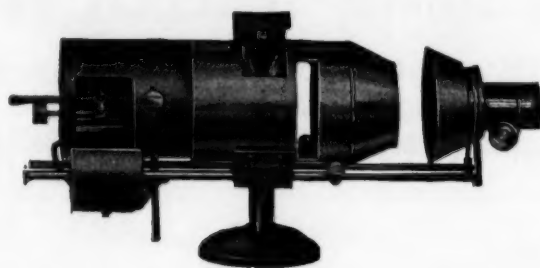
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Larger rooms shall be subject to such special requirements as may be deemed necessary by the Commissioner of School Buildings.

#### 2. Foul air flue with metal smoke stack in center.

Whenever foul air flue (has metal smoke stack inside such foul air flue) shall be constructed of double brick wall and be not less than 20x20 inches inside measurement. For a room of ten thousand (10,000) cubic feet or less the metal stack shall be eight (8) inches in diameter and made of No. 16 gauge iron, and shall be placed in the center of the foul air flue.

**Sec. 54. Double-flue chimney:** Double-flue chimneys, in which it is proposed to use one flue for smoke and the other for the discharge of foul air, will not be approved.

**Sec. 55. Location of foul air flue:** The foul air flue shall, in all cases, be located in the same end of the room as the heater, and in no case shall the foul air flue be less than four (4) feet from the shield of the heater.

**Sec. 56. Register of foul air flue:** The foul air flue shall be equipped with a damper or a register. The register shall be not less than three hundred (300) square inches. Register must be installed at floor level, but no register may be placed in floor.

**Sec. 57. Evaporating pan:** A suitable container for evaporating water shall be placed, preferably on the stove, but in every case inside the jacket.

#### XII. Basement Furnaces.

**Sec. 58. The heating capacity of furnaces shall be determined as follows:**

1. One (1) square foot of grate area to every twenty-five hundred (2,500) cubic feet of contents of schoolrooms to be heated.
2. One (1) square foot of grate area to every thirty-five hundred (3,500) cubic feet of contents of other rooms to be heated.
3. Not less than thirty (30) square feet of direct heating surface to every square foot of grate area.
4. Furnaces with greater direct heating surface than thirty (30) square feet to one (1) square foot of grate area, or with special heat tubes for separate hot air leaders, shall be subject to such variations from the above

requirements as shall be determined by the Commissioner of School Buildings.

**Sec. 59. Fresh air intake:** All air to be heated shall be drawn from outside the building into the fresh air intake, except that air passed thru an air washer of approved design may be drawn from the building. The fresh air intake, when located below the main floor, shall have a cross section area equivalent to not less than eighty (80) per cent of the cross section area of all the warm air ducts. When fresh air is taken in above the roof, such intake must be not less than twenty-five (25) feet from toilet vents. Proper precautions must also be taken to have opening from side opposite chimney or toilet vents, and protected by means of screens or louvers.

**Sec. 60. Furnace casing:** The air space between the furnace and the outside casing shall have at least twenty-five (25) per cent more cross sectional area than the total area of all the hot air leaders taken from it.

**Sec. 61. Warm air ducts:** In a gravity system of ventilation, the flues for admitting warm air to any room on the first floor shall have a cross section area of not less than one (1) square foot for every one hundred sixty (160) square feet of floor area in the schoolroom. The warm air ducts for the second floor shall have a cross section area of three-fourths ( $\frac{3}{4}$ ) square foot for every one hundred sixty (160) square feet of floor area.

**Sec. 62. Ventiducts:** In a gravity system of ventilation, the ventiducts from any room on the first floor shall have a cross section area of not less than three-fourths ( $\frac{3}{4}$ ) square foot for every one hundred sixty (160) square feet of floor area of the schoolroom. The ventiducts from the second floor shall have a cross section area of one (1) square foot for every one hundred sixty (160) square feet of floor area of schoolroom. Vent openings must be at the floor level, on the same side of the room as the warm air flues. If desired, part or all of the air from the schoolroom may be vented thru coat rooms immediately adjoining this side of the room. Satisfactory provision must be made for stimulating an upward current in ventiducts. See also section 43.

**Sec. 63. Dampers:** A ventiduct shall be provided with an approved damper, having an operating device in the room for which the ventiduct is used.

**Sec. 64. Plenum fan ventilation:** The warm air ducts and the ventiducts of a plenum fan system of ventilation shall have a horizontal area of not less than one square foot for every two hundred seventy (270) square feet of floor area of the schoolroom.

**Sec. 65. Humidity of air:** Vapor pans for moistening air must be installed with every furnace, and preferably placed inside of casing near the top.

#### XIII. Steam Heat.

**Sec. 66. Installation:** The heating system shall be combined with the ventilation system, and, whenever practicable, the direct radiation and the indirect radiation shall be connected to separate mains.

#### Gravity Ventilation.

**Sec. 67. Areas of ducts:** In a gravity system of ventilation, the heat ducts and the ventiducts shall each have a cross section area of not less than one (1) square foot for every one hundred sixty (160) square feet of floor area of the schoolroom. Fresh air intake shall be as specified in section 59.

**Sec. 68. Indirect radiation:** Heat ducts shall be supplied with not less than fifty (50) square feet of indirect radiation for each square foot of cross section area of duct.

**Sec. 69. Accelerating Coil:** Each ventiduct shall have the equivalent of not less than twenty (20) square feet of accelerating coil.

#### Mechanical Ventilation.

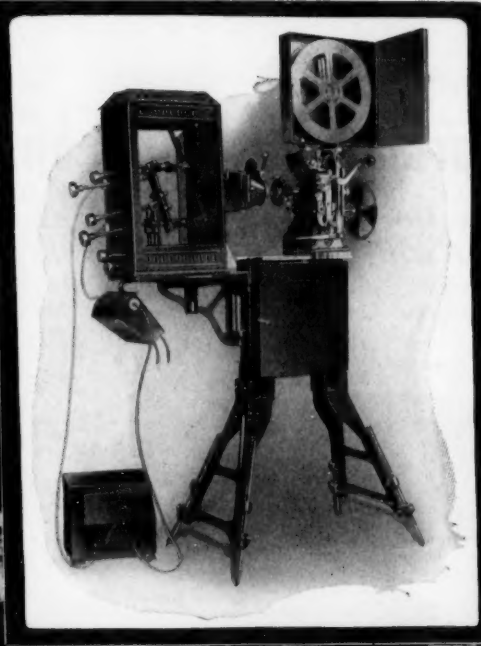
**Sec. 70. Amount of tempering coil:** In a plenum fan system of ventilation, air being introduced into the room at approximately seventy (70) degrees Fahr., the amount of tempering coil to be installed shall be computed on a basis of not less than one (1) square foot of actual heating surface for each fourteen (14) cubic feet of air to be heated per minute.

**Sec. 71. Velocity thru heater:** A velocity of not over one thousand (1,000) feet per minute thru the heater shall be used as a basis for computation.

**Sec. 72. Stacks of tempering coil:** Each stack of radiating coil must be valved separately and consist of not less than four (4) rows of standard indirect radiators, unless system is too small to warrant such installation.

**Sec. 73. Size of vertical risers:** In a plenum





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fan system of ventilation, the size of all vertical risers—heat ducts and ventiducts—shall be computed on a basis allowing for a velocity of from four hundred (400) to six hundred (600) feet per minute. Velocities in horizontal ducts shall be estimated on a basis of nine hundred (900) to one thousand (1,000) feet per minute.

Sec. 74. *Diffusers and deflectors:* All fresh air outlets shall be equipped with a full set of diffusers and deflectors.

Sec. 75. *Velocity at outlet:* The velocity of the air thru the register face shall not exceed three hundred (300) feet per minute.

Sec. 76. *Distribution of heat ducts:* When practicable, the fresh air to standard schoolrooms shall be delivered thru two ducts rather than concentrated thru one. In high school assembly and study rooms, the number should be increased to such an extent that an even distribution of air is secured.

Sec. 77. *Fans:* All fans must be so designed, constructed, mounted and connected with motor that they will operate noiselessly and without vibration. Normal speed of fans shall be kept as low as possible, taking into full consideration the type of fan to be used, the resistance to be overcome, and the volume of air to be delivered. Specifications must state explicitly the type of fan, its capacity, and its normal speed.

Sec. 78. *Fresh air intake:* The area of the fresh air intake must equal in square feet the volume of air introduced into the building per minute divided by one thousand (1,000).

#### XIV. Electric Wiring.

Sec. 79. *Standard installation:* All wires, fittings, materials, installation and construction work shall conform to the latest requirements of the National Board of Fire Underwriters.

#### XV. Fire Protection.

Sec. 80. *Fire alarm:* All school buildings of four rooms or more shall be provided with an efficient fire alarm system.

Sec. 81. *Fire protection:*

1. On each floor, including basement, there shall be placed at least one three-gallon chemical fire extinguisher at a readily accessible point. In large buildings, where the area of each floor exceeds six thousand (6,000) square feet, there shall be placed on each floor a three-gallon chemical fire ex-

tinguisher for each two thousand (2,000) square feet of floor area.

2. The statutes provide: "Public school buildings and seminary, academy and college buildings, more than two stories high, shall be provided, when practicable, with an inside or outside standpipe as hereinafter specified. Each six thousand feet of area or fractional part thereof covered by a building shall be provided with a one and three-fourths inch (1 3/4) standpipe, and sufficient one and one-fourth inch (1 1/4) hose connected therewith on each floor, and constantly furnished with sufficient water pressure from water works or pump which can be put into instant action; or for each such area there shall be a two and one-half inch (2 1/2) metallic standpipe, with metallic ladder attached above the first story, located upon the outside of the wall, extending above the roof and so situated as to be accessible from the roof, and from each story above the first, with valves and male hose connections at every story and on roof, and female hose connections at the base of pipe of such size and pattern as to allow connection with the equipment of the local fire department." See sections 5110 and 5107, General Statutes, 1913.

Note.—Two-inch (2) inside standpipe is evidently intended for one and three-fourths inch (1 3/4) where specified above.

#### XVI. Condemnation of School Buildings.

Sec. 82. *Unfit and unsafe buildings:* Any school building which upon investigation has been found unfit or unsafe may be condemned by the Superintendent of Education. After the date set for the discontinuance of the use of such building no public school may be held therein or public moneys used to maintain the building.

#### WASHINGTON "SCHOOL BOARDS SECTION" MEETS.

The school boards section of the Washington State Teachers' Association held its annual session on October 29 at Seattle. The Wider Use of the School Plant was the subject for the morning meeting. Mr. R. W. Jones, secretary of the Seattle school district, urged the free, supervised use of school buildings for community purposes

to accredited organizations, and suggested the appointment of social engineers to promote the work of community and civic centers.

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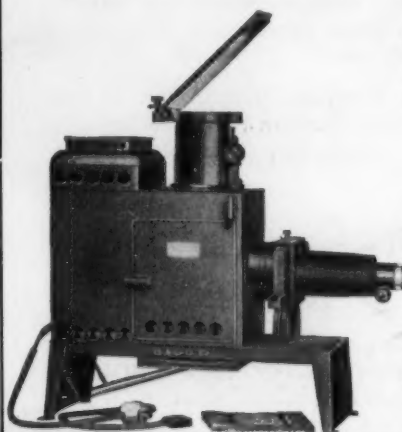


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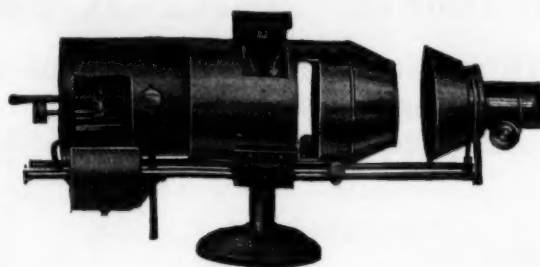
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Larger rooms shall be subject to such special requirements as may be deemed necessary by the Commissioner of School Buildings.

2. Foul air flue with metal smoke stack in center.

Whenever foul air flue (has metal smoke stack inside such foul air flue) shall be constructed of double brick wall and be not less than 20x20 inches inside measurement. For a room of ten thousand (10,000) cubic feet or less the metal stack shall be eight (8) inches in diameter and made of No. 16 gauge iron, and shall be placed in the center of the foul air flue.

**Sec. 54. Double-flue chimney:** Double-flue chimneys, in which it is proposed to use one flue for smoke and the other for the discharge of foul air, will not be approved.

**Sec. 55. Location of foul air flue:** The foul air flue shall, in all cases, be located in the same end of the room as the heater, and in no case shall the foul air flue be less than four (4) feet from the shield of the heater.

**Sec. 56. Register of foul air flue:** The foul air flue shall be equipped with a damper or a register. The register shall be not less than three hundred (300) square inches. Register must be installed at floor level, but no register may be placed in floor.

**Sec. 57. Evaporating pan:** A suitable container for evaporating water shall be placed, preferably on the stove, but in every case inside the jacket.

#### XII. Basement Furnaces.

**Sec. 58. The heating capacity of furnaces shall be determined as follows:**

1. One (1) square foot of grate area to every twenty-five hundred (2,500) cubic feet of contents of schoolrooms to be heated.
2. One (1) square foot of grate area to every thirty-five hundred (3,500) cubic feet of contents of other rooms to be heated.
3. Not less than thirty (30) square feet of direct heating surface to every square foot of grate area.
4. Furnaces with greater direct heating surface than thirty (30) square feet to one (1) square foot of grate area, or with special heat tubes for separate hot air leaders, shall be subject to such variations from the above

requirements as shall be determined by the Commissioner of School Buildings.

**Sec. 59. Fresh air intake:** All air to be heated shall be drawn from outside the building into the fresh air intake, except that air passed thru an air washer of approved design may be drawn from the building. The fresh air intake, when located below the main floor, shall have a cross section area equivalent to not less than eighty (80) per cent of the cross section area of all the warm air ducts. When fresh air is taken in above the roof, such intake must be not less than twenty-five (25) feet from toilet vents. Proper precautions must also be taken to have opening from side opposite chimney or toilet vents, and protected by means of screens or louvers.

**Sec. 60. Furnace casing:** The air space between the furnace and the outside casing shall have at least twenty-five (25) per cent more cross sectional area than the total area of all the hot air leaders taken from it.

**Sec. 61. Warm air ducts:** In a gravity system of ventilation, the flues for admitting warm air to any room on the first floor shall have a cross section area of not less than one (1) square foot for every one hundred sixty (160) square feet of floor area in the schoolroom. The warm air ducts for the second floor shall have a cross section area of three-fourths ( $\frac{3}{4}$ ) square foot for every one hundred sixty (160) square feet of floor area.

**Sec. 62. Ventiducts:** In a gravity system of ventilation, the ventiducts from any room on the first floor shall have a cross section area of not less than three-fourths ( $\frac{3}{4}$ ) square foot for every one hundred sixty (160) square feet of floor area of the schoolroom. The ventiducts from the second floor shall have a cross section area of one (1) square foot for every one hundred sixty (160) square feet of floor area of schoolroom. Vent openings must be at the floor level, on the same side of the room as the warm air flues. If desired, part or all of the air from the schoolroom may be vented thru coat rooms immediately adjoining this side of the room. Satisfactory provision must be made for stimulating an upward current in ventiducts. See also section 43.

**Sec. 63. Dampers:** A ventiduct shall be provided with an approved damper, having an operating device in the room for which the ventiduct is used.

**Sec. 64. Plenum fan ventilation:** The warm air ducts and the ventiducts of a plenum fan system of ventilation shall have a horizontal area of not less than one square foot for every two hundred seventy (270) square feet of floor area of the schoolroom.

**Sec. 65. Humidity of air:** Vapor pans for moistening air must be installed with every furnace, and preferably placed inside of casing near the top.

#### XIII. Steam Heat.

**Sec. 66. Installation:** The heating system shall be combined with the ventilation system, and, whenever practicable, the direct radiation and the indirect radiation shall be connected to separate mains.

#### Gravity Ventilation.

**Sec. 67. Areas of ducts:** In a gravity system of ventilation, the heat ducts and the ventiducts shall each have a cross section area of not less than one (1) square foot for every one hundred sixty (160) square feet of floor area of the schoolroom. Fresh air intake shall be as specified in section 59.

**Sec. 68. Indirect radiation:** Heat ducts shall be supplied with not less than fifty (50) square feet of indirect radiation for each square foot of cross section area of duct.

**Sec. 69. Accelerating Coil:** Each ventiduct shall have the equivalent of not less than twenty (20) square feet of accelerating coil.

#### Mechanical Ventilation.

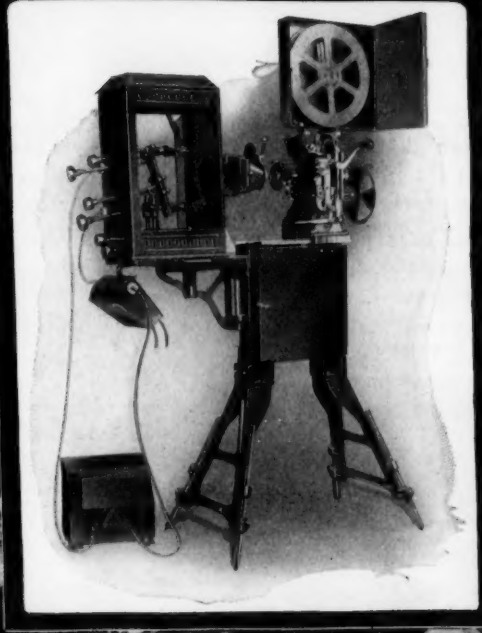
**Sec. 70. Amount of tempering coil:** In a plenum fan system of ventilation, air being introduced into the room at approximately seventy (70) degrees Fahr., the amount of tempering coil to be installed shall be computed on a basis of not less than one (1) square foot of actual heating surface for each fourteen (14) cubic feet of air to be heated per minute.

**Sec. 71. Velocity thru heater:** A velocity of not over one thousand (1,000) feet per minute thru the heater shall be used as a basis for computation.

**Sec. 72. Stacks of tempering coil:** Each stack of radiating coil must be valved separately and consist of not less than four (4) rows of standard indirect radiators, unless system is too small to warrant such installation.

**Sec. 73. Size of vertical risers:** In a plenum





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fan system of ventilation, the size of all vertical risers—heat ducts and ventiducts—shall be computed on a basis allowing for a velocity of from four hundred (400) to six hundred (600) feet per minute. Velocities in horizontal ducts shall be estimated on a basis of nine hundred (900) to one thousand (1,000) feet per minute.

**Sec. 74. Diffusers and deflectors:** All fresh air outlets shall be equipped with a full set of diffusers and deflectors.

**Sec. 75. Velocity at outlet:** The velocity of the air thru the register face shall not exceed three hundred (300) feet per minute.

**Sec. 76. Distribution of heat ducts:** When practicable, the fresh air to standard schoolrooms shall be delivered thru two ducts rather than concentrated thru one. In high school assembly and study rooms, the number should be increased to such an extent that an even distribution of air is secured.

**Sec. 77. Fans:** All fans must be so designed, constructed, mounted and connected with motor that they will operate noiselessly and without vibration. Normal speed of fans shall be kept as low as possible, taking into full consideration the type of fan to be used, the resistance to be overcome, and the volume of air to be delivered. Specifications must state explicitly the type of fan, its capacity, and its normal speed.

**Sec. 78. Fresh air intake:** The area of the fresh air intake must equal in square feet the volume of air introduced into the building per minute divided by one thousand (1,000).

#### XIV. Electric Wiring.

**Sec. 79. Standard installation:** All wires, fittings, materials, installation and construction work shall conform to the latest requirements of the National Board of Fire Underwriters.

#### XV. Fire Protection.

**Sec. 80. Fire alarm:** All school buildings of four rooms or more shall be provided with an efficient fire alarm system.

**Sec. 81. Fire protection:**

1. On each floor, including basement, there shall be placed at least one three-gallon chemical fire extinguisher at a readily accessible point. In large buildings, where the area of each floor exceeds six thousand (6,000) square feet, there shall be placed on each floor a three-gallon chemical fire ex-

tinguisher for each two thousand (2,000) square feet of floor area.

2. The statutes provide: "Public school buildings and seminary, academy and college buildings, more than two stories high, shall be provided, when practicable, with an inside or outside standpipe as hereinafter specified. Each six thousand feet of area or fractional part thereof covered by a building shall be provided with a one and three-fourths inch (1¾) standpipe, and sufficient one and one-fourth inch (1¼) hose connected therewith on each floor, and constantly furnished with sufficient water pressure from water works or pump which can be put into instant action; or for each such area there shall be a two and one-half inch (2½) metallic standpipe, with metallic ladder attached above the first story, located upon the outside of the wall, extending above the roof and so situated as to be accessible from the roof, and from each story above the first, with valves and male hose connections at every story and on roof, and female hose connections at the base of pipe of such size and pattern as to allow connection with the equipment of the local fire department." See sections 5110 and 5107, General Statutes, 1913.

Note.—Two-inch (2) inside standpipe is evidently intended for one and three-fourths inch (1¾) where specified above.

#### XVI. Condemnation of School Buildings.

**Sec. 82. Unfit and unsafe buildings:** Any school building which upon investigation has been found unfit or unsafe may be condemned by the Superintendent of Education. After the date set for the discontinuance of the use of such building no public school may be held therein or public moneys used to maintain the building.

#### WASHINGTON "SCHOOL BOARDS SECTION" MEETS.

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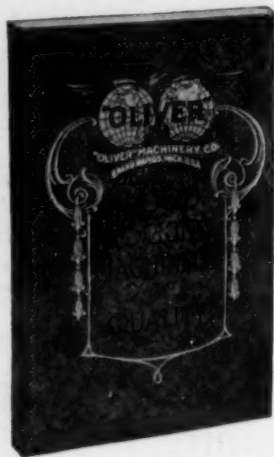


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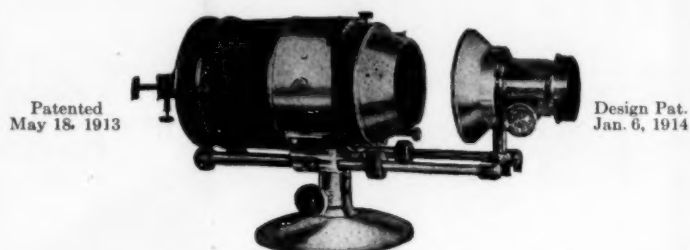
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## Among Boards of Education

### MAINE SCHOOL BOARDS MEET.

The Department of School Committee Members of the Maine Teachers' Association held its annual session on October 28th at Bangor. Mr. Prescott H. Vose of the Bangor school board presided. The chief address of the sessions was delivered by Deputy Commissioner Orr of Massachusetts. President C. G. Pearce of the Milwaukee Normal School discussed general administrative problems.

Dr. Orr in discussing lay and expert service in school supervision said in part:

Increase in extent and complexity of any enterprise calls for more thorough organization, otherwise confusion, duplication of effort, and consequent waste motion ensue. This principle operates in administration of public education as in other fields of human activity.

As the educational system has grown from the district school to the kindergarten, primary, grammar and high school of today, with corresponding development in courses of study, methods of instruction, and teaching force, it has been found necessary to transfer the direct management of the schools from the school committee to a trained expert—the superintendent of schools.

This latter official is now, in all well organized school systems, recognized as the executive officer, and, in increasing measure, is being given authority and direct responsibility in administration, in the selection of teachers, in the choice of textbooks, in the preparation of courses of study, in decision on cases of discipline, and in oversight of bills and accounts.

As the office of the superintendent of schools has gained in importance, and as, one by one, detail duties formerly discharged by members of the school committee, have been put in his care, the school committee, itself, has appeared

to decline in prestige and importance. In fact, cases might be cited where the school committee has ceased to be a factor of importance in school administration, and has given over to the superintendent of schools all responsibility. Such a situation is fully as dangerous and deplorable as one where the executive officer is constantly thwarted and hampered by members of the school committee who, with good intentions, are still ignorant of the fundamental principles of good school administration.

Any condition whereby the people cease to exercise a deciding and controlling influence on any agency devoted to public service tends to develop a bureaucracy—an absolute centralization of power and authority—a situation which in time begets ignorance and indifference to the needs of the community to which the institution should minister.

Every democracy, in contrast, to absolutist forms of government, is under the necessity, if its public business is to be well administered, of establishing a mode of procedure whereby the people shall be free in determining on large and general policies, while at the same time the expert selected to put such policies into effect shall be unhampered and free from interference by meddling persons.

Such a process of adjustment between control in large matters by the people thru their representatives—the school committee—and the proper independence of action by the superintendent of schools, as the executive expert, is now much in evidence in the American school system.

It is fair to conclude that, while the school committee is to be increasingly freed from the burdens of attending to many details, its importance is to be enhanced in decisions on large and important policies.

Among the large and weighty responsibilities that now devolve upon the school committee the following may be regarded as essential:

(a) The selection of a superintendent of schools, on the basis of professional knowledge, personal qualities, and fitness for the particular field in which he is to be employed.

No person should be placed in charge of any public school system who has not the equipment for the work, which can be gained only by study, observation and practice.

Then, too, the committee must take due heed of fitness for the particular task, acceptability to the community, and personal qualifications.

When the appointment is made for personal or partisan reasons, or in the hope of securing as superintendent of schools one who will in all matters defer to the school committee, or because a lower salary will be accepted, no gift of prophecy is needed to predict that the schools are likely to suffer.

(b) The school committee should require the superintendent of schools to outline a program for the development of the schools, as regards buildings, equipment, courses of study, methods of instruction, and to show why such a program is desirable. In fact, tho the members of the school committee are laymen, the superintendent of schools should be able to make clear to them his educational plans and the reasons therefor.

(c) Again, the school committee at its meetings should discuss, under the leadership of the expert, new phases in education.

Prior to any decisions in regard to changes in textbooks, selection of teachers, courses of study, changes in methods of instruction, or additions to school plant, the school committee should give full and thoughtful consideration to the recommendations of its superintendent of schools. Such deliberation is particularly necessary in all matters which call for increased expenditures.

(d) By adopting rules and regulations in accordance with which the business of the school system is to be conducted, cases of discipline, teachers' duties, and responsibilities of superintendents, principal and teachers, janitors, attendance officers and school physicians are defined and its own business conducted, the school committee will do much to secure an orderly,



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efficient administration, and diminish the occasions of conflict of authority, or arbitrary action by any school official.

(e) The superintendent of schools is under obligation to keep his committee informed of all matters of moment in the schools. In the files of his office there should be collected data, easily accessible, which show the exact status of each department. It is essential that the school committee and superintendent of schools should have at command a set of books showing the exact condition of the school finances.

(f) Regular meetings of the school committee should be held. Only action taken at such meetings should be regarded as valid. The school committee should act as a unit.

(g) Public meetings should be conducted under the auspices of the school committee, for the purpose of informing the people at large of policies under consideration and the reasons therefor.

To sum up the conditions of good administration in a public school system are:

- Definition of responsibility.
- Centralization of authority.
- Recognition of the expert.
- Discussion and deliberation prior to decision on general policies.
- Orderly and regular procedure.

### AMONG SCHOOL BOARDS.

Washington, D. C. One of the recommendations of the District Commissioners to Congress this winter will be the abolition of the District Board of Education. It is expected that the Commissioners will have the privilege of appointing the educational directors and the right to decrease their number.

The public schools of the District of Columbia are now under the joint supervision of the Commissioners and the Board of Education. The former has charge of the buildings and establishment of salaries, and the latter directs the teaching personnel and the preparation of the curriculum. The nine members of the board of directors are appointed by the District Supreme Court and each serves for three years.

The Commissioners have endeavored for several years to bring the school system more under their control and have made efforts in Congress to have the power of appointing educational di-

rectors transferred to the Commissioners from the District Supreme Court.

The abolition of the board of education, or even the establishment of a smaller group of directors, is an entirely new phase to the question of control of the school system. It is felt that the change would be a calamity as neither a single director nor a smaller group would have the broad grasp of affairs pertaining to education that a larger board would have.

Philadelphia, Pa. Replying to criticisms on the number of part-time pupils in South Philadelphia, President Henry Edmunds of the board has announced that by January first, 6,600 of the 9,986 children on part-time will have been placed in full-time classes. The board at present has enlarged facilities in the way of a new school building, an addition, and several wings to another school, which will make a reduction of about 3,000 part-time pupils. A proposed new school is to be located at Ninth Street and Oregon Avenue. The board has spent \$1,650,000 of the \$7,026,709 since 1911 for buildings and sites in the district of South Philadelphia.

Ogden, Utah. The board has established an ungraded school for the instruction of sixty mentally defective children.

Wilmington, Del. Upon the recommendation of Supt. C. J. Scott, the board has adopted a new marking system for the grades. The system seeks to effect greater efficiency in the schools and to render the work of the pupil and his standing in classes clearer to parents. The changes affect the monthly marks of students. The report system has been abolished in some of the grades and introduced in others where it has not been in force.

Under the system previously in use, a pupil was promoted without examination, provided an average of 80 per cent had been maintained in every subject except one, and in that one the mark to be not lower than 75 per cent. Under this plan, students who might be weak in a subject could slide thru the curriculum and be graduated without having a satisfactory standard. To avoid this, the student will be compelled to pass an examination in a deficient subject before promotion. In no case will any child be exempt from the examination unless an average grade of "A" or "B" has been maintained in that subject,

the "A" and "B" average meaning 100 to 90 per cent in the former and 90 to 80 per cent in the latter case.

In the use of the former markings of "good" and "fair" parents think of these in the strict sense of the word and do not conceive that the students who receive these marks are really unsatisfactory in their work. They read the marks as meaning that students are good or fair students, and when promotion time comes they wonder why their children are not advanced with the rest. The elimination of the "G" subject as it has been known will force the students to maintain high grades in every subject.

The last change is the raising of the passing examination grade. This will be raised from 70 to 75 per cent, but it will have little effect on the promotion lists of the schools. It will mean that the neglectful students will fall victims to the change.

New York, N. Y. The board of superintendents has asked the board of education to approve the plan of the School of Pedagogy of New York University to make a careful, systematic study of defective children. The study will be limited to Public School 177, Manhattan.

Janitors of the Weber County, Utah, schools have entered upon the first of a series of meetings for the improvement of the janitorial service and the discussion of practical methods. The discussions involve the heating, lighting, ventilation and cleaning of school buildings.

Waukegan, Ill. The board has raised the insurance on school buildings from 50 to 80 per cent of their full value. It was found that with a 25 per cent rebate on premiums paid under the 80 per cent clause, the cost to the board would be no more than it is at present.

Gloucester, Mass. The board has asked the public property committee of the city council to adopt a rule that janitors of two-story or higher buildings, with heating in the basement, shall remain in or about the buildings during school hours.

Haverhill, Mass. The board has asked the city council to pass an ordinance forbidding the sale of food on the street and sidewalk near school buildings. It was pointed out that the food offered for sale was of an unwholesome character.



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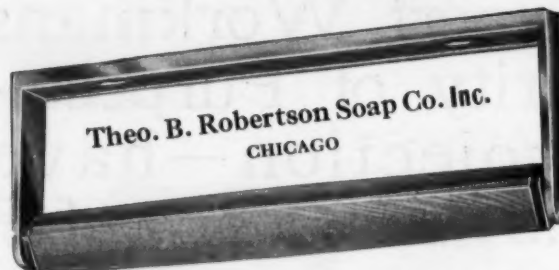


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We manufacture a complete line of Liquid Soaps, Cleansers and Disinfectants, and are headquarters for Paper Towels, Toilet Paper, Mops, Brushes, etc. Get our prices on these supplies before ordering, as we take the entire output of mills.

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Canton, Ill. A special class for defective pupils of the schools has been formed at the Kellogg School. Fourteen pupils have been enrolled.

Providence, R. I. The public schools have enrolled 250 feeble-minded and backward children in special classes. In addition, there are 80 children on the waiting list who will enter as soon as the accommodations are provided. The work in Providence was begun in 1897 with thirty children in two rooms. At present there are fourteen rooms with eighteen pupils to a class. The school day consists of 90 minutes of manual training, 90 minutes of physical education and 75 minutes of academic work. Folk dancing and games for the development of number work are also offered.

Davenport, Ia. Traffic warning signs have been ordered placed near all school buildings for the protection of children.

Ames, Ia. The Engineering Extension Department of the Iowa State College is offering a special course for firemen and janitors. The course consists of five evening lectures and lessons, taking up efficiency in handling heating plants, ventilation and kindred problems. One of the school boards in a nearby town has offered to pay the tuition of all janitors who attend the course.

A school for janitresses has been conducted in the city of New York with success. The school seeks to train women for janitor service and the applicants are enrolled from a congested tenement district. A graduating class of fifty received diplomas.

Philadelphia, Pa. The elementary schools committee has recommended that assistants be appointed to aid the engineers in large buildings.

Bellingham, Wash. The board has ordered the elimination of the spring vacation. The change is necessary thru the passage of a state law requiring twelve calendar weeks of summer vacation. A confusion of the calendar prepared by Supt. E. L. Cave made it necessary to substitute a new schedule without the spring vacation.

Peabody, Mass. The board has ordered that janitors shall remain in school buildings during the regular sessions. They are required to make the rounds of the buildings for the purpose of discovering incipient fires or other matters in need of attention.

Grand Rapids, Mich. The board has passed an order prohibiting the conduct of classes in school attics. Monthly reports of principals and janitors on fire drills and apparatus are required.

Joliet, Ill. The board has placed traffic warning signs near the school buildings to warn automobilists against fast driving.

The District Judge of Oklahoma City, Okla., thru the grand jury, has exonerated the members of the local board of education of charges of "gross neglect of duty" and "mal-administration in office." The investigators reported "friction" among the members due to a spirit of faction and obstinacy, but stated that this could not be attributed to any corrupt motive. It was also the opinion of the body that the evidence was insufficient to sustain any of the charges against Supt. G. V. Buchanan. A compliment was paid to the administrators of the local school system in the statement that "the public schools of Oklahoma City are at this time in a high state of efficiency."

The city of Providence, R. I., has erected a school building costing \$300,000, the Bridgman school, in which is to be tried out a form of the Gary plan. The school has 30 classrooms, an assembly hall and baths, and has accommodations for 1,250 pupils.

The school day is conducted according to a fixed schedule. Classes begin at 8:30 in the morning and close at 4:15 in the afternoon. The pupils spend each week 17½ hours in the classrooms, 6¼ hours in manual work or study, and five hours in recreation or play activities. For the boys, the manual work consists of drawing and wood work. For girls, drawing, sewing and cooking are offered.

The board of education of San Francisco, Cal., has co-operated with the local Chamber of Commerce in a proposed survey of the public school system. Dr. P. P. Claxton, United States Commissioner of Education, has been asked to take charge of the survey.

New York, N. Y. The board has adopted a resolution of the Committee on School Records, providing that any pupil in the elementary or high school who loses or destroys any books or property of the schools and who refuses to pay for the same shall be brought into court and fined. The rule was passed following a report of

the chairman of the committee, in which he stated that lost and misused textbooks were costing the city annually upward of \$10,000.

Milwaukee, Wis. Supt. M. C. Potter has issued an order that all accidents in school buildings shall be reported immediately. The order applies to all accidents which may occur in and about the school building, and particularly to accidents in the manual training shops and on the playgrounds. The reports must include not only the nature and the cause of the accident, but also names of witnesses, etc. The chief purpose of the reports is to protect the injured children and to protect the principal and the teachers later.

Lynn, Mass. The school board has abolished the sub-committees formerly maintained. The members are of the opinion that the work of the board should be done jointly by all the members and not by the individual committees.

Toledo, O. The board has compiled a list of the backward children in the respective schools. The information will be used in determining the number of backward children, the causes for poor school work and the remedy which may be applied.

Portland, Me. The city authorities have ordered the placing of traffic warning signs near school buildings. The signs are intended to protect the children from speeding automobiles.

Saginaw, Mich. Three stereopticon projecting machines have been installed in the schools. The machines will be used for illustrating geographical and historical studies. A total of 600 slides of geographical and historical character have been obtained for use in the machines.

State Supt. A. M. Deyoe of Iowa has upheld the school board of Des Moines and the superintendent of Polk County in requiring tuition of Thomas D. Hatton for attendance in the city schools. Young Hatton lived with his parents at Dakota City, in Humboldt County. He came to live with J. C. Hume, and the latter, after paying \$50.75, claimed that the exaction of money was illegal.

Upon appeal, the county superintendent upheld the school board in its contention. This has been affirmed by the state superintendent, who holds that the legal residence of a minor is that of his parents, unless the said parents relinquish all rights on their child.



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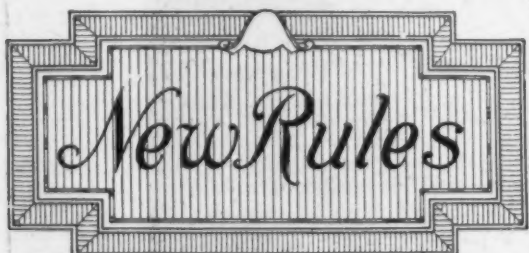


Models 64, 65 and 66 are especially adapted for high school work. The cut shows No. 64B which is equipped with side-fine adjustment (lever type), one ocular, two objectives, 16 m. m. ( $\frac{3}{4}$  in.) and 4 m. m. ( $\frac{1}{4}$  in.), double revolving nose piece, iris diaphragm in stage, complete in cabinet, \$31.50.

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Leominster, Mass. The board has adopted a set of rules to govern the duties of janitors. The rules read:

1. Janitors will be under the immediate direction of the superintendent of schools and under the general direction of the school committee.
2. They shall not leave the school buildings during school hours, with the exception of the lunch hour, preferably between 11 and 12 o'clock at noon. The exact time may be arranged by the principal of the building.
3. They must sweep and dust all of the rooms and corridors at least twice a week; the dusting must be done in the morning with a dampened cloth, and a sweeping compound used on the floor unless recently oiled.
4. Blackboard erasers are to be cleaned daily.
5. Washbowls and drinking fountains must be cleaned by wiping at least once a day, and the stream in the bubblers kept regulated so that it will be high enough to keep the pupils' mouths from the metal. Waste paper baskets must be dumped daily.
6. During the summer the school floors must be scrubbed thoroly.
7. Rooms must be warmed to a temperature of from 65 to 68 degrees at least fifteen minutes before school opening time; a temperature of 68 degrees must be maintained as nearly as possible thruout the day. Care must be taken in extra cold weather to prevent water pipes from freezing.
8. Cold air chambers must be kept free from dust at all times, and foul air flue must be cleaned once a month at least.
9. Water closets must be inspected by them for obnoxious markings and if any are found, reports must be made to the principal.

10. Clocks must be kept as nearly on correct time as possible.

11. School desks and seats must be adjusted when required by the principal.

12. The flag must be displayed on the building every day when the weather is suitable, and on the inside of the building on other days. When put up outside of the building, the flag should be taken in at night.

13. School lawns must be kept in good order and mowed. Snow must be removed from walks as soon as possible, and all walks must be swept frequently at all seasons of the year.

14. When coal is delivered, the janitors must collect tickets from the driver and turn them over to the superintendent.

15. Tobacco is prohibited, as the janitors are forbidden to smoke in the buildings or on the school grounds. They must not allow others to do so.

16. Janitors must perform other duties as prescribed by the superintendent or the school committee.

17. They may be allowed a two weeks' leave of absence during the summer vacation, the exact time to be arranged by the superintendent.

Muscataine, Ia. The school board has prohibited smoking either on or off the school grounds. The rule is in compliance with a state law which prohibits smoking by school boys.

Omaha, Neb. The board has adopted a rule intended to obtain the unbiased support of the janitors in the inspection and testing of school coal. The rule provides that janitors and engineers of school buildings shall not buy their personal supplies of coal from the dealers who furnish the schools.

Sheldon, Ia. The board has adopted a rule forbidding the use of tobacco in or about the school buildings.

Bellows Falls, Vt. The board has adopted a rule prohibiting the raising of money in schools thru raffles, games of chance, or lotteries.

### RULES AND REGULATIONS.

The Chicago Board of Education is considering a rule providing for the appointment of a committee on "adjustments." It is to be the function of the committee to receive complaints and, in

general, to act as a mediary between the executive and supervisory officers of the schools and the teachers, and, in general, to act as an adjuster of school "troubles." The rule reads in part:

"It shall be the duty of the committee to hear and discuss with members of the teaching force and other employees all matters pertaining to salaries and working conditions. All differences arising between the members of the teaching force and other employees, between the superintendent of schools and department heads, and between parents and teachers, shall be referred to this committee for investigation and adjustment."

The rule is being opposed as interfering with the prerogatives of the superintendent.

San Francisco, Cal. The board has adopted a rule prohibiting the organization of school children's choruses for outside singing. The rule seeks to prevent interference with school work and to avoid distraction from the regular classroom studies.

Providence, R. I. The board has ruled that students in the evening grammar schools shall make a deposit of \$3.50 and students in the evening high schools \$7.50. The deposits are required as a guarantee that the students will attend 90 per cent of the sessions.

Council Bluffs, Ia. The school board has adopted a rule requiring that students must pass physical examinations before they will be permitted to take part in football games or other forms of high school athletics. The rule is the result of complaints following the death of a student. The physical condition of the student was such that he was unfitted for strenuous sports.

The Supreme Court of Oregon has upheld the state law providing for the dissolution of Union High School districts. The opinion was given in the case of the state, appellant, against School District No. 3, Clatsop County, and affirms a ruling of the Circuit Court of the same county. A dispute had arisen following the institution of a suit to restrain the district boundary board of Clatsop County from considering the result of an election to dissolve a union high school district.



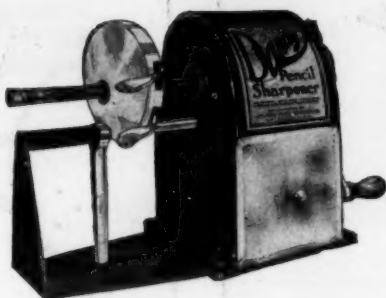
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## Building and Finance

### A FINANCIAL SURVEY.

A financial survey of the Boston school system was undertaken on October 27 by Dr. J. H. Van Sickle of Springfield, Mass., and a group of experts, including Dr. Leonard P. Ayres of the Russell Sage Foundation, Dr. George D. Strayer of Teachers' College, E. H. Carris, deputy commissioner of education in New Jersey, and E. E. McNary, supervisor of manual training, Springfield.

The survey, which was ordered by Mayor Curley and the Boston Finance Commission, will seek to establish efficiency and cost of the newer school activities, which have been introduced since 1911, and in general, the larger administrative and special educational activities. Particular attention is being paid to the vocational and continuation departments, vocational guidance, social and night school centers. Cost and necessity are the underlying factors to be determined, and much attention is being paid to financial and statistical data.

### GROWTH OF THE GROUP IDEA.

The high school group idea, which is an original California innovation, is being accepted on the Pacific Coast by practically every city which is confronted with the problem of erecting new high school quarters. A recent compilation shows that the following 24 groups have been completed or are well under way:

Lodi High School Group, Lodi, Cal.  
Stockton High School Group, Stockton, Cal.  
Los Angeles State Normal Group, Los Angeles, Cal.  
High School Group, San Jose, Cal.  
Boys' Polytechnic High School, Riverside, Cal.  
Coronado School Group, Coronado, Cal.  
Hollywood Polytechnic High School, Los Angeles, Cal.

El Centro Union High School, El Centro, Cal.  
Los Angeles Academy, Los Angeles, Cal.  
East Los Angeles High School Group, Los Angeles, Cal.  
Santa Monica Polytechnic High School, Santa Monica, Cal.  
San Diego Polytechnic High School, San Diego, Cal.  
Brawley Union High School, Brawley, Cal.  
Hyde Park Group, Hyde Park, Cal.  
Calexico Union High School, Calexico, Cal.  
Alhambra High School Group, Alhambra, Cal.  
Redondo Beach Union High School, Redondo Beach, Cal.  
Polytechnic High School, Fullerton, Cal.  
Hayward Polytechnic High School, Hayward, Cal.  
Berkeley Polytechnic High School, Berkeley, Cal.  
Inglewood High School Group, Inglewood, Cal.  
Manual Arts High School Group, Los Angeles, Cal.  
Pasadena Polytechnic High School, Pasadena, Cal.  
Venice Union High School, Venice, Cal.  
In the East the new Trier Township High School at Winnetka, Ill., has been a notable example of the group high school. The city of Cincinnati has adopted the idea for a group which is to cost more than \$1,000,000, and which is to include twelve buildings.

### BUILDING AND FINANCE.

In carrying out a consistent policy for improving old buildings in New York City, Superintendent of School Buildings C. B. J. Snyder rebuilt, during the summer and fall of 1915, eight large elementary schoolhouses in Brooklyn and Manhattan. In rebuilding, the entire lighting of the respective schools was modernized

by tearing out the brick piers between the windows, replacing the same with narrow metal mullions. In some of the schools the whole front and back of the structure had to be torn out to complete the work. Other improvements that were undertaken in these schools included the replacement of wooden stairways with fireproof, concrete and steel stair cases, fireproofing the heating apparatus, etc.

Following a bitter fight between the school board and city officials, the New York Board of Estimate and Apportionment has fixed the budget allowance for the city school system at \$40,116,000. This amount is a reduction of nearly \$3,000,000 from the amount originally estimated by the department heads of the board of education, and involves a net reduction of nearly \$1,000,000 from the minimum amount asked by President Thomas W. Churchill and his associates.

The new budget does not take into account an obligation incurred by the board of education for taking care of the seventh and eighth grade teachers—a total of \$261,480 in the form of promotional increases in salary. It is likely that the teachers will not receive any of this amount. More serious than this by far is the fact that the new budget will require the curtailment of many school extension activities and will interfere with the night schools and school lectures.

Erie, Pa. A school bond issue of \$1,000,000 was authorized on November 1 for the extension of the school plant. The issue was carried by a majority vote of 3,424 in favor of the project and 2,875 against.

Mr. W. J. Flynn, Business Manager of the Erie school district, led in the campaign for the bonds and conducted the publicity work in connection with the campaign.

The money just raised is to be used in the erection of the new academy high-school building in the south end of the city, and an East high-school building for which a site has not yet been selected. An addition will be erected to the present high school. A grade school will be constructed and important alterations will be made to other school buildings.

Summing up the total damage to the public schools of New Orleans by the storm of September 29, the City Architect finds the total to be



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Buffalo, N. Y.  
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244-254 S. 5th St.,  
Philadelphia, Pa.  
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Chicago, Ill.  
211-217 East 6th St.,  
Los Angeles, Cal.

about \$157,000. Of course, when the repairs are completed this amount may be found to be less than the actual damage and it may be found to be more, but the indications are that it will be found that more than this sum will be needed to repair the schools. To meet this sudden and unlooked-for expense the City of New Orleans has included the amount in a loan of \$500,000 which is now being obtained of the banks and two large corporations, the street railways company and the telephone company. This money is required to repair the public buildings damaged by the storm.

The injury to the school system was considerable, and altho the schools had opened for their fall session on September 20, it was found necessary, for safety, to close all but a few schools again, and the last ones were not opened until October 25. Under the direction of members of the Board of Education and Inspectors Gore and Davidson, a working force of 185 men was organized to make emergency repairs to the 88 school buildings, and when these completed the work that was necessary to be done at once to use the schools, the City Architect took up the matter of making the permanent repairs. Not only were school buildings damaged but some were demolished. However, the damage to the new high schools, modern buildings, was slight, and reflected credit to City Architect Christy. However, the handsome Beauregard school had its roof blown off, and the modern McDonough No. 14 suffered from water damage, the wind being so strong as to blow the water under the slates. The Miro negro school, a building that was about to be condemned, was demolished entirely, as were also several other buildings of frame or of old construction.

Just to what the school buildings were exposed may be conjectured when it is recalled that the United States weather bureau instruments recorded a gale with a sustained velocity for several hours of 86 miles an hour, and for the brief period of twenty seconds a velocity of 120 miles. Nearly every building in the city sustained some damage, from the loss of a few slates to complete unroofing. Several churches were demolished, and four city markets went down. However, the city recovered rapidly, business was resumed as usual the next day, and now, save for a broken tree here and there, or wall or building that has

not been reconstructed, there is but little evidence of the terrible wind and rain. Fortunately, the loss of life in the city proper was small, being ten persons. The shipping in the harbor was not seriously injured, no large vessels sinking, but quite a number of small boats were wrecked.

The Chicago Board of Education has prepared an ordinance for enactment by the city council providing for zones of quiet around the school buildings. The ordinance will require that zones of silence be established within two blocks of every grade school. Signs notifying pedestrians and others are to be erected in conspicuous places. The pavement of the streets surrounding schoolhouses is to be limited to creosoted wooden blocks or asphaltum.

Milwaukee, Wis. The Milwaukee Citizens' Bureau of Municipal Efficiency, in its survey report to the buildings committee of the school board, has requested the board to adopt efficiency methods for the school plant. The adoption of a new structural program would seek to relieve congestion and to promote sanitary and hygienic conditions in the school buildings.

The report makes the following recommendations:

That a structural inventory and repair schedule be prepared with a view to listing the work for the next two years.

That a structural program providing for the elimination of barracks within the next two years be prepared.

That a canvass of the school population be made so as to enable the board to prepare for school growth for at least five years.

That definite standards be adopted in regard to the physical and structural details of school buildings, these standards to embody the most recent development in school building construction and to be revised at frequent intervals.

That efforts be made to strengthen the control of janitorial service by fixing responsibility for the efficiency of this service by abandoning the "farming out" principle as regards janitors' assistants and by insisting upon the use of a few basic efficiency methods in the public schools.

That members of the school board assume individual responsibility for physical conditions in specific school buildings.

That more extended use be made of school buildings for demonstrating principles of hygiene, sanitation and physical measurement.

Marquette, Mich. After a joint meeting of the Marquette, Ishpeming and Negaunee school boards, the members of the former were unanimous in their decision that the insurance rates on Marquette schools are excessive. It is planned to obtain a re-rating or to devise some other plan for a more satisfactory rating. At present the board carries insurance amounting to \$102,000 for the buildings and contents, and an additional \$40,000 for boiler insurance. From information at hand, the board estimates that the rate of insurance on school buildings is from 80 to 100 per cent higher than that on private homes.

The board has two plans under consideration to bring about a more satisfactory insurance rating. One is to cancel the policies now in force with the beginning of the new year, and to advertise for bids on a blanket policy covering all the schools of the city. The second is the establishment of a sinking fund of \$5,000 to \$6,000 per year until a sufficiently large fund has been obtained with which the board can carry its own insurance.

Cincinnati, O. To provide more adequate supervision of the school buildings for safety against fire and panic, Supt. R. J. Condon has asked the local fire department to make frequent inspections of the fire drills, to pass upon them, point out any weaknesses, and to make suggestions for improvement. Principals have been requested to re-read and to direct special attention to the rules for fire precautions and for conducting fire drills.

The rules for fire precautions require that accumulations of rubbish on school premises shall be avoided; that defects in heating or lighting shall not be neglected, and that obstructions shall not be allowed in corridors, stairways or exits.

For fire drills, the rules provide that drills shall be seriously conducted and executed as tho the necessity existed. They should be held at irregular and unannounced periods.

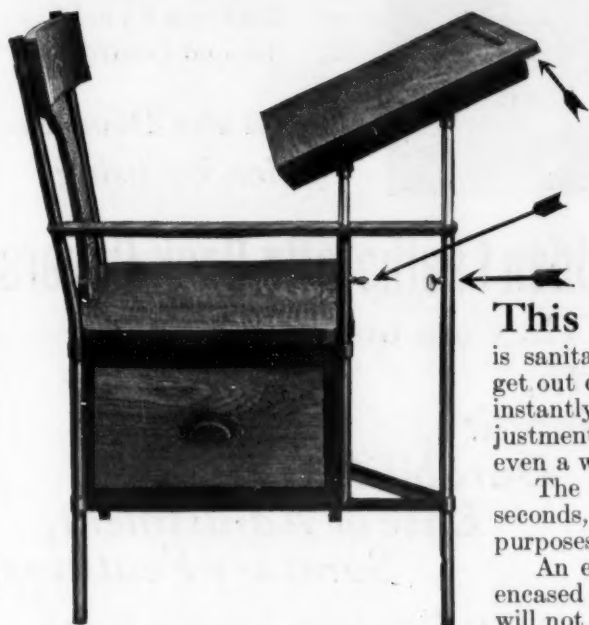
Doors, exits and points of special danger must be guarded by teachers or older pupils, who must be especially drilled for their positions.



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There is a curved dust cap fitted to the extended foot which serves to prevent the accumulation of dust, at the same time forming an exceptionally large bearing area on the floor. The sanitary features of this desk have been planned scientifically and the result is most satisfactory, according to the exacting demands of experts.

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The illustration conveys the general appearance of this desk but it might be well for us to mention:

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## AN ADVENTURE IN SUPERVISION.

The city superintendent who makes school visits in an automobile or a street car, has no conception of the hardships which are suffered during the winter by the county superintendents in a sparsely settled country. The stories which many superintendents in the Northwestern States can tell include details of blizzards, freezing cold, impassable mountain trails and bad food. But even these difficulties are mild when compared with the adventures and hardships of the superintendents sent out by the United States Bureau of Education to look after the native schools in Alaska. Such an adventure, rivaling in danger the exploits of the most daring mariners and explorers, is told in the last report of the Alaskan schools by Mr. A. N. Evans, Superintendent of the Western District of Alaska.

While crossing over the mouth of a wide bay in a small schooner, a storm came up. The wind and rain became so strong that the schooner was blown out to sea. Then, writes Mr. Evans:

"A little after midnight, rising on a big sea, the schooner capsized, and we had to take to the dory, which was unusually light and only eighteen feet long. In launching the dory, the compass and all our provisions (except a little raw bacon) were lost. Fortunately, in capsizing the schooner did not sink, and realizing that it would float, we hastily pulled in behind it and used it for a breakwater for two nights and a day. Finally the storm quieted down somewhat and, realizing that we were constantly being blown farther to sea, we concluded to try to reach land.

"Accordingly, at daylight on the morning of the 27th we left the shelter of the wreck and, without compass, headed in the direction where we supposed the land to be. After pulling for two more days and nights, we finally reached land, having had no water and nothing to eat but raw bacon.

"We had been thoroly drenched all the time.

After reaching shore and satisfying our thirst, we began to examine an abandoned igloo, when a canoe with three natives appeared and supplied us with some dry fish, sea oil and a little burnt flour for use in lieu of tea.

"These natives lived about fifteen miles away, but had been unable to reach their village on account of the wind. We took shelter in the abandoned igloo, ate the dry fish and sea oil, and endeavored to dry out by building a fire in the igloo. We spent a very uncomfortable night, due to the intense pain in our feet, which were swollen.

"Two days were spent at the village in arranging for a skin canoe to take us to Bethel and in getting some food. Six days were consumed at Bethel, the delays being due to head winds and tides. On arriving at Bethel we were in a condition that made travel impossible, so we remained there six days under the care of Dr. Reed.

"Tho Dr. Reed and others urged us to remain longer, we felt it was necessary to hasten on, and, reaching the portage, about one hundred miles above Bethel, three days and a half were consumed in crossing to Russian Mission on the Yukon. Leaving Russian Mission the following day, we arrived at St. Michael."

## CO-OPERATION OF NORMAL SCHOOL AND CITY.

Since September, 1914, the Fort Hays Normal School has used the city schools of Hays, Kansas, as a pedagogical laboratory for observation, investigation and practice. Mr. Charles A. Shively, Professor of Education and Director of the Training School, is *ex officio* Superintendent of City Schools, performing all the functions of that office and directing at the same time the teacher training department of the Normal School. The City Board of Education provides the buildings, furniture, equipment, and pays the salaries of the regular grade and high school teachers.

The superintendent nominates the teachers, and, in general, supervises their work, arranges the course of study, etc. The services of the superintendent and of all special supervisors in the city schools are paid for by the state.

The members of the senior class in the Normal School are given daily practice in the city school in teaching actual classes under natural school

conditions. The ordinary problems of administration and school organization are met daily as they would be met in a regular school. Community life and the relations of the school to the home are factors in teacher training that the average model school with its artificial atmosphere and surroundings cannot offer.

The arrangement between the Hays Normal School and the City of Hays are not only advantageous to the normal school students—they have been found especially valuable for the city as a whole. The schools are receiving the services of a much higher grade of experts than they could afford to employ regularly, and the regular classroom teachers are also of a higher grade. The educational and administrative policies of the school are more continuous and permanent, and the teaching generally during the first year of trial has proven to be superior.

## BUSY SUPERINTENDENTS.

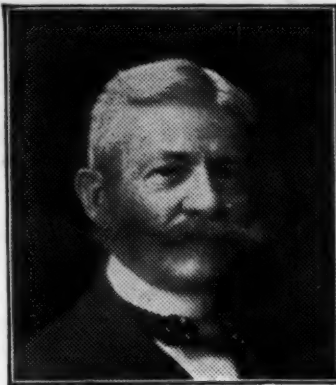
Supervising Principal Edward V. Walton, of the Springfield and Union, N. J., public schools, has adopted a novel plan for the monthly report to parents. Instead of placing only the percentage in each subject on the report card, the principal has adopted a method which indicates the reason why the students received a certain mark.

There are three divisions of the report card that explain why the student is in good standing or deficient. They are: Attitude toward school work, recitations and conduct. Under each of these subjects are subdivisions. Under "attitude toward school work" appears the words indolent, waste time, work is carelessly done, copies, gets too much help, give up too easily, shows improvement, very commendable.

Under the division marked "recitations" come: poorly prepared, appears not to try, seldom does well, inattentive, promotion in danger, capable of doing much better, work shows falling off, work of grade too difficult, showing improvement, and very satisfactory.

"Conduct" is subdivided as follows: Restless, inattentive, inclined to mischief, rude, discourteous at times, annoys others, whispers too much, shows improvement, very good.

The Pennsylvania State Department of Education has recognized the apprentice schools operated by the Westinghouse interests, the Carnegie Steel Company and other large corporations. Un-



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der the new child-labor law the minor employees of the firms come under its provisions.

Deadwood, S. D. Superintendent B. E. Myers has introduced motion pictures in the grade schools. The pictures will supplement the respective subjects of the school course and will be shown in one of the local motion picture theaters. Deadwood is said to be the first city in the state to adopt visual instruction for the schools.

The Nevada State School Survey Commission authorized by the legislature of the state in the spring of 1915 was organized on October 30. Governor Emmet D. Boyle was chosen permanent chairman and Dean George F. James, executive secretary. The commission includes: Supt. B. D. Billingham, Reno; President A. W. Hendrick, University of Nevada; John Edwards Bray, state superintendent of public instruction; Miss Anna H. Martin of Reno; Mr. J. B. Tregloan of Tonopah; Mrs. C. C. Emerson, Yerington; Mr. M. L. Lee, Pioche; Mrs. Otto T. Williams of Elko and Mrs. Chas. C. Chandler of Ely. The state board of education, ex-officio members of the survey commission, was selected to act as executive committee for it.

The Gary System is being tried out experimentally in the Cleveland and Abington Avenue Schools, Newark, N. J. A total of 2,100 children are enrolled in the Cleveland School and nearly as many attend the Abington School.

The general education board of the Rockefeller Foundation has made a gift of \$5,600 to the New Hampshire State Department of Education to organize a bureau for the critical study of school processes. The gift has placed New Hampshire in the forefront in the matter of school research work and is expected to be of far-reaching scope and importance to the entire country. The board has also made a gift of \$5,500 to the Maine Department of Education for the promotion of rural education along the lines encouraged by the board of Southern states.

A survey of the Iowa state educational institutions was begun November 8th by a commission appointed by the Federal Bureau of Education. The studies undertaken include the work in the classrooms, the number of pupils in classes, extension work and its efficiency, the amount of classroom space used, and the general efficiency of the systems and managements. The survey

is the first of its kind to be undertaken by the Federal Bureau. It is being made upon the request of the Iowa State Board of Education as a means of knowing how the work of the state institutions is rated, and to learn possible means for improving the several institutions.

A school survey of Pasadena, California, was begun November first by a series of teachers' committees. The investigations are being made under the personal direction of Supt. Jeremiah Rhodes and are intended "to provide sane, practical means for injecting new life into the school system and to keep things going under pressure."

The survey committees include nineteen groups of teachers: 1. Laws; regulations; 2. The Child; 3. Course of Study: general; 4. Relations: balance; 5. Teachers; 6. Finances; 7. Schools; kind; 8. Course of Study: social life group; 9. Pasadena and Her Schools; 10. Physical: grounds, buildings, equipment; 11. Course of Study: child welfare group; 12. Course of Study: industrial and vocational; 13. Supervision and Administration; 14. Course of Study: measurement group; 15. Outside Activities; 16. The Three Types: classical, industrial, social; 17. Organization: mechanics, spirit, classification, promotion; 18. Measures and Test of Efficiency and Power; 19. Course of Study: English.

The committees study their section of the work from the point of what Pasadena's school system has; from the point of view of what other good school systems have, and from the aspect of determining what improvements or additions might be made in the local system. The reports of the various committees will occupy prominent positions in the annual report of the superintendent for the next school year.

Supt. A. G. Miller of Waycross, Ga., has recommended that the members of the board make frequent visits to the schools to gain first-hand information of what is going on and of the needs of the schools. Mr. Miller makes his recommendation on the ground that the members will be better able to answer questions and reply to criticisms.

Hermiston, Ore. Under the supervision of a member of the teaching corps, the boys of the high school recently exhibited high-class educational motion pictures for an entire week. Capacity audiences were present at two presenta-

tions of Evangeline. The members of the school furnished the music between the pictures.

Piqua, O. The school board has adopted a strict non-partisan policy in the matter of opening school buildings for public use. A committee has been appointed to prepare a set of rules governing the use of school buildings by public and private organizations.

Knoxville, Tenn. The cost of running the school system will be \$141,000 for the ensuing school year, according to Supt. W. E. Miller. The amount for salaries of the teaching and janitorial corps will be \$126,000. There is an enrollment of 5,855 pupils and a teaching corps of 196, of whom 146 are women.

Red Bank, N. J. The board of education has permitted the use of school buildings for club meetings and sociables. A series of recreation activities has been started for the winter.

Supt. W. E. Maddock of Superior, Wis., has estimated that at least 100,000 persons attended the public recreational activities conducted last year. The activities included the school playgrounds during school vacation, the civic bathing beach, the public skating rinks, and civic center meetings.

School buildings were used more than ever for cultural, civic, recreational and social meetings. A total attendance of 55,364 were reported at the night meetings in school buildings. This was an increase of 22,849 over the previous year, when an attendance of 32,515 was recorded. The meetings totaled 802, as against 722 during the previous year.

Chicago, Ill. Twenty-nine social centers have been opened in the public schools. An appropriation of \$21,250 has been made to cover the expense.

Detroit, Mich. The school board estimates that it can spend an average of six cents per evening for the education of 10,000 pupils in the evening schools. Assistant Superintendent Frank Cody has limited the expense to \$600 per evening so that the classes may be continued for at least 100 evenings. The total cost for the term will be \$60,000.

Westfield, Mass. The board has created the position of superintendent of buildings, whose duties will be the repair and general upkeep of school structures. Mr. C. Nelson Seymour has been appointed.



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*Catalog "A3" describes them in detail.  
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### PERSONAL NEWS OF SUPERINTENDENTS

Mr. Galus B. Frost, superintendent of schools of the Georgetown district, Georgetown, Mass., died at a Haverhill hospital on October 19th. He had been superintendent at Georgetown since February, 1906.

Edward B. Hayward, formerly a member of the school board at Easton, Mass., died at his home at the age of 79 years.

Edward J. Ward, for five years director of the social center work of the Wisconsin University, Madison, Wis., has resigned to take charge of the community organization work of the United States Bureau of Education. Mr. Ward enters upon his work January first.

Supt. G. V. Buchanan of Oklahoma City, Okla., accused of actions unbecoming a public school educator, has been found not guilty by a committee of businessmen and lawyers who tried the case. The prosecution did not offer evidence to sustain the charges, and Supt. Buchanan had witnesses to prove his good character and reputation at former superintendencies.

The attorneys for the complainants withdrew from the case and the decision was given in favor of Mr. Buchanan.

Dr. Edwin D. Shaeffer, a member of the school board of Reading, Pa., died on October 24 of blood poisoning. He was 47 years of age.

Mr. James H. Gray, secretary of the school board of South Brownsville, Pa., died at his home on October 19th, at the age of 71. Mr. Gray served as school director from 1894 to 1899 and was re-elected in 1902. He had been secretary from 1894 up to the time of his illness.

Mr. Axel E. Johnson, formerly superintendent of the city schools and Converse County High School, Douglas, Wyo., has been employed to organize the educational forces for the Colony Holding Corporation at Atascadero, Cal. This corporation is developing 16,000 acres of orchards, 5,000 acres of parks, and 2,400 acres of town site. Mr. Johnson has been given a free

hand, and when the first school unit is built it will contain conveniences for adult and community education and social center features. He will not be hampered for lack of funds, and will secure the best available expert for each department. The school plant will be open every day and evening in the year for educational and recreational purposes. Every possible educational activity in the colony will be organized. The department of education expects to reach every member of the home, and to be directly helpful to every industry.

Supt. Frederick M. Hunter of Lincoln, Neb., has been re-elected for a term of three years, with a substantial increase in salary. Much satisfaction has been expressed locally, particularly in the press, with the action of the school board.

North Adams, Mass. Mr. Charles Sumner Cole, a member of the school board from 1890 to 1896, died at his home on October 29th after a brief illness. He was 50 years old.

#### CHILDREN'S LAWS OF 1915.

Forty-five state and territorial legislatures and the Congress of the United States in 1915 passed laws affecting children, according to the Children's Bureau, which has completed its survey of such legislation during the current year. Special reference is made to the impressive bulk of children's laws and the number of commissions appointed to study and prepare for future legislation.

Arkansas, Florida and Utah have commissions to report on the needs of the feeble-minded; New Jersey, a commission to prepare a state program for the reorganization of public care of defectives, dependents and delinquents; Missouri and New Hampshire, commissions on the needs of the blind; Delaware, a commission on vocational education; Idaho, a commission to report on the need for a minimum wage law; Florida and Indiana, commissions on the need for mothers' pensions; and California, a commission to study social insurance.

The Bureau says that the appointment of these commissions indicates a growing realization that benevolent intent cannot safely be accepted as a substitute for the careful formulation of statutes for social betterment. The subjects to which study is directed are all of immediate concern to

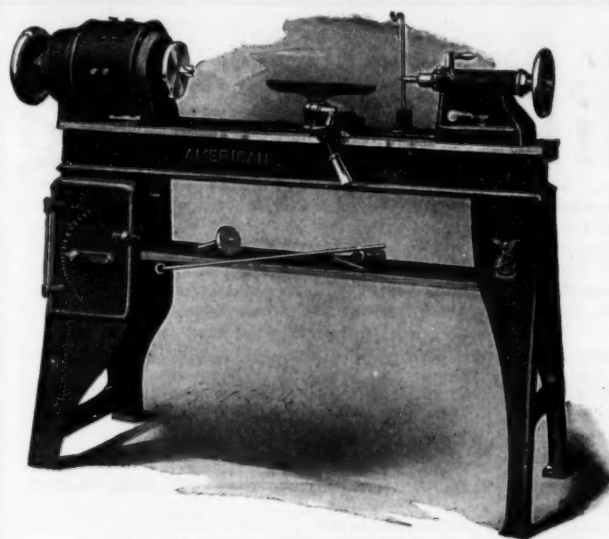
children, and the states are thus fairly committed to a policy of selecting and harmonizing provisions which leads plainly toward the collection and codifying of all laws relating to children.

As showing the great amount of children's legislation the Bureau says that 27 states have amended their provisions for dependent children, eighteen have improved their treatment of juvenile delinquents; sixteen have strengthened their child labor law; fourteen have concerned themselves with the needs of the mentally defective or feeble-minded; three states and the District of Columbia were added to those specifically permitting the use of public school buildings as social centers, and nine amended or for the first time passed a playground law, and four states passed a model vital statistics law in which the Children's Bureau is interested, because it considers complete birth registration of fundamental importance to child welfare work.

A few of the forty-five states made notable advances. Alabama, for example, whose legislature meets only once in four years, enacted a new child labor law, a compulsory school attendance law, an excellent desertion and non-support law, and a state-wide juvenile court law. Florida remodeled its treatment of juvenile delinquents, recognized the principle of compulsory school attendance, passed the model vital statistics law, and appointed two of the state commissions already referred to. Kansas established an industrial commission to regulate hours, wages and conditions of work for women and minors, and a division of child hygiene in the state board of health; it also enacted a playground law and a mothers' pension law. New Jersey and Wyoming passed comprehensive acts relating to the care of dependent children, and Pennsylvania carefully drafted laws relating to child labor and vocational education.

The Children's Bureau has included in its review the outlying territories of the United States and reports that Alaska has forbidden the employment of boys under 16 underground in mines; Hawaii has passed a curfew law for girls under 16 in Honolulu; the Philippines have provided for dental clinics in the schools and created a public welfare board to establish and maintain social centers; and Porto Rico has passed a modern juvenile court law.





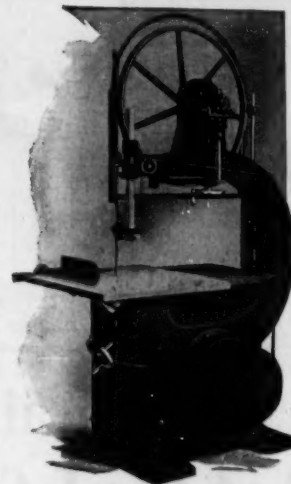
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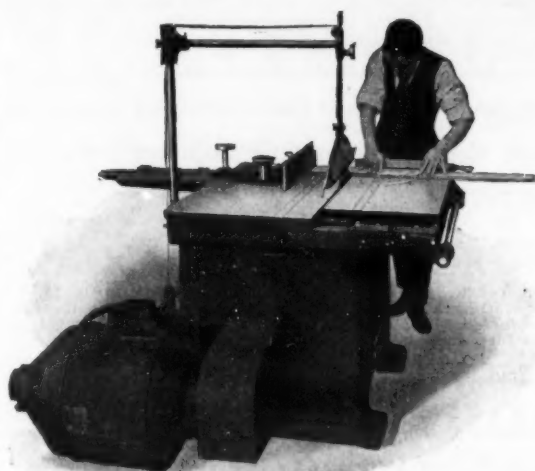
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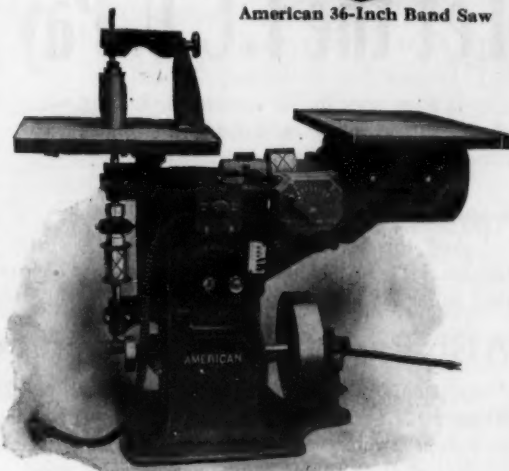


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Our new Manual Training School Catalog is now ready for distribution. It is a book that ought to be in the hands of every manual training teacher, for it is designed with a view to assisting the teacher to some extent, at least in his class work. Your request for a copy will be complied with gladly.



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## HIGH SCHOOL ADMINISTRATION

Oklahoma City, Okla. A Junior High School on the plan of the Kansas City Manual Training School is contemplated for the local school system by Supt. G. V. Buchanan. The school is to be established in one of the older buildings, and is to include the students of the seventh and eighth grades, and the ninth and tenth grades of the high school. A feature of the course is to be domestic science, manual training and allied subjects.

Seattle, Wash. A new plan of recitation and study has been put into operation in the high schools. The school day has been extended to five hours, allowing five one-hour periods for combined recitation and study in place of six recitation periods of forty minutes. The plan aims to give students opportunity for study under the supervision of the teacher in charge, in all except the so-called laboratory subjects. Study before and after sessions is encouraged and students are permitted to be in the building before nine in the morning and after three in the afternoon.

Simsbury, Conn. Agriculture and domestic science have been introduced in the high school.

Portland, Ore. The board has fixed tuition rates for the non-resident students in the high school. High school students are required to pay \$80 per year, elementary pupils \$45, and students in the school of trades \$135 per year. A total of 36 students come under one or another of these classifications because they live in school districts which maintain their own schools. There are 140 high school students who are non-residents but whose homes are in districts which do not maintain high or trade schools. The home districts are responsible for the tuition of students who attend the city schools.

Bennington, Vt. The higher grades of the school system have been organized into a Junior High School. The Senior High School comprises

the upper three classes of the high school and is housed in a new building recently completed.

The California State Board of Education has announced a course of military instruction for all the high schools of the state. Certificates for teachers will be issued to competent military instructors. Salaries will be paid at the same rate as other special teachers receive.

Rockford, Ill. A military course has been introduced. Ten companies of seventy boys each have been formed. The course consists of one hour's training each week under the direction of military officers.

Lincoln, Ill. A co-operative commercial course has been introduced in the high school. It is planned to have students take the fourth year in the local business college.

Fitchburg, Mass. Agriculture has been introduced in the high school. A tuition fee of \$100 per year will be charged non-resident students in this course.

Omaha, Neb. The board has appropriated \$150 for the maintenance of a school orchestra.

State Supt. J. A. Churchill of Oregon has announced that 160 of the high schools in the state have met the requirements for standard four-year high schools. It is expected that at least fifty more will meet the same next year. The standard schools are determined by personal examinations of the State Superintendent. Schools which have been standardized enjoy the advantages of the county high school tuition fund, the county high school fund, and the acceptance of their graduates in standard colleges.

Portland, Ore. The board has adopted voluntary military drill for the boys of the high school. The instruction will be given outside of school hours and will be without expense to the school system.

Hamilton, O. Supt. Darrell Joyce, in co-operation with Principal C. H. Lake of the high school, has outlined a two-year co-operative shop course for the school. The course is elective and is patterned after that conducted at the state university. The plan provides for alternate weeks in the shop and school for a period of two years. Credit will be given for shop work the same as for school recitations. Four trades including machinist, draftsman, patternmaker and iron molder are offered.

Elgin, Ill. Military training has been established in the high school.

Seattle, Wash. Supt. Frank Cooper has assigned four members of the teaching faculty as advisors to the girl students in the Queen Anne, Franklin, Lincoln and Broadway High Schools. The advisors will perform duties similar to those carried on by the men and women advisors in the state university.

Ashtabula, O. A course in agriculture has been introduced in the high school. Twenty-one students have enrolled.

Wheeling, W. Va. Spanish has been introduced as an elective subject.

The Massachusetts State Board of Education has prepared a general course in science to be used in the first two years of all high schools. The course has been placed in the beginning of the high school course to stimulate the interest of students so that they will want to continue it in the last two years.

In the preparation of a general science course, no exhaustive study is made of any branch of the sciences, but the course is divided into units, each distinct in itself, and at the same time forming an essential part of the whole course. General information is emphasized and pupils are given some elementary ideas of a number of sciences and also a basis of selection for future work in this line.

In the selection of topics, ample opportunity is given for applying the various methods of instruction. One pupil sets up the apparatus while another explains it. A third is asked to write a short article on the subject under consideration. Another may be asked to bring to class a newspaper or magazine article dealing with the subject. Such a method of instruction allows the teacher to utilize those projects which are best suited to the particular school.

While it is expected that the general recommendations and methods of instruction will be uniform, it is hoped that local material will be utilized to the best advantage in the instruction, to better adapt the work to the immediate surroundings and conditions of the pupils whose science work has not appealed to them as practical and beneficial.





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And this is the simplest and least expensive accident that might happen. There are hundreds of ways by which even the most careful may suffer loss of time and salary, with greatly increased expenses.

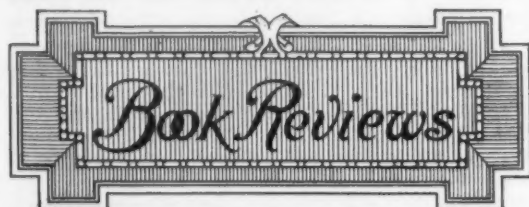
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#### Farm Shop Work.

By G. M. Brace and D. D. Mayne. 291 pages. American Book Co., New York.

This excellent textbook offers a very complete course in farm mechanics for the rural high schools. Beginning with specific directions for all ordinary woodworking processes, it gives in logical order of difficulty a very full series of projects in woodworking, blacksmithing, cement and concrete construction and harness mending. The wood problems begin with a sawbuck and conclude with directions for selecting and caring for tools. Each lesson, or project, includes a complete stock list, a tool list, a statement of the operators and minute directions for each step. The book is so practical and complete that it will be almost self-teaching. The country boy will find it a mine of information and a source of continual help in designing, making and repairing farm implements, buildings, and miscellaneous devices used in and about the house and the barn.

Like all texts on manual training, the book is almost too specific and complete. It leaves very little for the teacher to do other than to repeat the text and insist that the directions be followed exactly. The fault here is not so much with the authors as it is with the teachers who will use the book. It is not pleasant to think that there is so little professional ability among the teachers of manual training in the rural high schools as to require absolute completeness, step for step, in classroom texts.

#### Famous Old Tales.

By Henry C. Lodge. 133 pages. Houghton, Mifflin Co., Boston.

This collection of twelve old English stories for children reads as interestingly as it did many years ago when the reviewer, as a small

boy, first devoured it. The quaint line drawings and wood engravings have a charm that no modern halftone engraving can equal.

The book is one which every child ought to be familiar with.

#### Making the Most of Life.

By M. V. O'Shea and J. H. Kellogg. 298 pages. Price, 65 cents. The Macmillan Company, New York.

This is not a spiritual or social study, but an informal presentation of those simple, important principles of physiology upon which depend long and healthy lives. The authors have made the most of their opportunity to make health an interesting subject for study. The book is fully and splendidly illustrated.

#### Shakespeare's Hamlet.

Edited by David T. Pottinger. Cloth, 190 pages. Price, 25 cents. Longmans, Green & Co., New York.

This newest edition to the Longmans' classics has been especially edited to facilitate the understanding of Shakespeare's language and the appreciation of his thought. The volume is splendidly adapted to secondary schools.

#### Shakespeare's Hamlet.

Edited by Allan Abbott, Teachers College, New York. 207 pages, cloth. Price, 30 cents. Charles E. Merrill Company, New York.

The modest editorial apparatus which has been added to this text is addressed to students in the third and fourth years of the high school.

The life of Shakespeare is unusually complete in detail; the discussion of the history of the play is ample, and the study of the plot is a gem of dramatic analysis.

#### A Foundation Study in the Pedagogy of Arithmetic.

By Henry Budd Howell. 328 pages. Price, \$1.25. The Macmillan Co., New York.

This book covers a review of representative genetic psychological, statistical and didactic studies in the arithmetical abilities of savages, civilized children and adults. To these studies are added the author's own experiments in the ability of children to apprehend numbers and to perform the fundamental processes. The book will be valuable in outlining school programs and fixing standards of attainment.

## Books for Superintendents and Teachers on Child-Training

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How school study may take on a vital relation to the daily life of children, and enthusiasm aroused for their work.

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The physical, mental, and moral aspects of adolescence studied with reference to school work.

**The Child and His Spelling**, by William A. Cook, University of Colorado, and M. V. O'Shea, University of Wisconsin.

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**Natural Education**, by Winifred Sackville Stoner.

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**The Use of Money**, by E. A. Kirkpatrick, State Normal School, Fitchburg, Mass.

School methods for teaching children how to save and how to spend; with the principles of a practical arithmetic.

**The Wayward Child**, by Mrs. Frederic Schoff, Pres. of the National Congress of Mothers and Parent-Teacher Association.

Sound and unsound methods of treating wayward children by teachers.

**Backward Children**, by Arthur Holmes, Dean, Pennsylvania State College.

The causes, varieties, tests, and symptoms of arrested development, the treatment to be applied, and the training of special teachers.

**Honesty**, by William Healy, Director of the Juvenile Psychopathic Institute.

Practical advice in the prevention and cure of stealing by children.

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#### The Wheat Industry.

By N. A. Bengtson and Donee Griffith. 339 pages. The Macmillan Company, New York, N. Y.

In this volume the authors have emphasized two major lines of thought—that of production and the regional distribution of wheat.

The parts of a wheat kernel and their uses are first described. Many will be surprised at some of the facts here stated. Then comes mention of the varieties of seed brought by scientists from practically all the wheat growing regions of the world to obtain wheats better suited to the climate and seasons of different regions of the United States. Preparation of soil, methods of seeding, harvesting, threshing, transportation and storage, marketing, milling have each a chapter of great interest. The illustrations often contrast past and present industrial conditions. One wheat sown by hand is opposite one of wheat sown with a press drill. Pictures of wheat slowly harvested with sickle or cradle come just before one in which wheat is going down under a McCormick reaper with a binder. In the chapter on milling the process is traced from the days of the quern to a modern milling plant in Minneapolis.

Pointed questions, illustrations galore, fascinating maps, a well-ordered development of the subject combine to make "The Wheat Industry" a book of exceptional interest.

#### Live Language Lessons.

Third Book. By Howard R. Driggs. 440 pages. Price, 50 cents. The University Publishing Company, Chicago and Lincoln.

Noticeable and noteworthy features of Part One in "Live Language Lessons" are a variety of material, definite requirements, constant drill in oral and written expression. A general subject is studied under several sub-topics. Thus under Homes and Homemaking work is required under (1) Picturesque homes; (2) Work of the home; (3) Cooking as an art; (4) How homes are supplied with food; (5) The farm. Each of these topics is again sub-divided. Some points are put in the form of questions for debate. The original or more creative work is closely related to the interests of the child's everyday life. The



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selections for study are interesting in themselves and from good sources.

The best feature of Part Two is that the grammar is grammar, pure and simple. It is neither muddled nor weakened by introduction of outside requirements. A good book, tho if one were critical, perhaps hypercritical, one might say the title claimed too much.

### Muscular Movement Writing Manual.

By C. C. Lister. 114 pages. The Macmillan Company, New York, N. Y.

From the minuteness and clearness of the explanations and directions it would seem that every precaution had been taken to obtain an interesting and successful manner of teaching writing. Some of the leading points are: (1) Sufficient theory to inform teachers on reasons; (2) A definite plan for the teaching of each letter and figure; (3) The letters, both capital and small, are classified according to their fundamental movements.

The aim of the system is "to transfer the power which moves and controls the pen in writing from the small and weaker muscles of the fingers, to the larger, stronger, more enduring muscles of the arm and shoulder."

### The Coming of Arthur, The Holy Grail, The Passing of Arthur.

By Sophie Chantal Hart. 102 pages. Price, 25 cents. Longmans, Green & Company, New York, Chicago.

The order in which "The Idylls of the King" were published, 1842-1885, is unique. The editor has justly remarked that "they gather together all the strands of experience in the poet's life—his youthful vision, his manhood's clearer survey, and the ripe wisdom of old age."

In "The Coming of Arthur" a stainless Knight is portrayed. "The Holy Grail" is fitly called the most mystical and most beautiful of these idylls, while "The Passing of Arthur," in the fast,

dim battles in the West and the death of the King, marks the ruin of great hopes. Tennyson himself has said that the first idyll and the last are intentionally more archaic than the others.

Frequent references to Malory and quotations explaining allusions appear in the notes. These with a bibliography, a chronological table, an introduction full of fine distinctions complete the editorial work. These idylls should be read aloud that both ear and eye may tell the mind how rarely beautiful are diction and rhythm.

### Civics for New Americans.

By Mabel Hill and Philip Davis. 178 pages. Price, 80 cents, net. Houghton Mifflin Company, Boston, New York, Chicago.

Two workers in socialized civics have here told new Americans not only what is being done for them, but what they are expected to do for themselves and for their fellows. Under the general heads of opportunities, protection, conveniences, needs, improvements, this book deals almost exclusively with conditions of city life. The last chapter, tho, is on civil government and tells these newcomers just how they may become citizens, and states their duties quite as strongly as their rights. An unusually full appendix gives many valuable facts and some helpful forms. Questions at the end of each sub-topic are for the use of either classes or individuals.

Capital type, numerous illustrations, and attractive style, form a happy combination.

### The Book of Brave Adventures.

By Dorothy Donnell Calhoun. 147 pages. The Macmillan Company, New York, N. Y.

Nearly every one of these tales of brave adventure begins with a short sentence. There are many short sentences, few long ones, but each sentence adds a thought needed in exactly that place. These tales are etchings in words; each sentence is a line. Their careful study would

inform and inspire any wishing to become artistic story tellers.

The first tale is of the Hebrews, fleeing from Egypt, the land of bondage, to Canaan, the promised land. The last one is of the "forty-niners," risking health and life in a mad search for gold. From Greece, France, Scandinavia, New England, Old England, other instances have been taken. A poem based upon the adventure usually follows the prose account. Striking events in history have long inspired poets, painters, sculptors, since real life is stronger than fiction.

### Laboratory Exercises.

By William McPherson and William Edwards Henderson. 12mo, cloth, 128 pages. Price, 40 cents; in Biflex Binder, 60 cents. Ginn & Company, Boston.

A notice of McPherson and Henderson's "First Course in Chemistry" appeared in the August number of the SCHOOL BOARD JOURNAL. It was then mentioned that a manual was in preparation and would be published in the near future. That promise has been fulfilled and the manual in question bids fair to meet the claims made by its authors.

It contains 101 exercises for which the directions are clear and explicit. Many are of a highly practical character. Examples are exercises on the action of preservatives, tests for fats and proteins, analyses of baking powders. Experiments marked with a star are optional, thus affording a margin. It is said the apparatus is simple, the materials relatively inexpensive while an appendix contains detailed information relating to the purchase of such apparatus and materials.

### School Arithmetic—Grammar School Book.

By Florian Cajori. 437 pages. The Macmillan Company, New York, N. Y.

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let not the several qualities  
of a thing escape thee.

—Marcus Aurelius.

Many persons judge a system of shorthand on the most superficial consideration. It looks simple; or it seems to be easy to learn; or it is apparently very brief. And so it is chosen.

The wise ones look to all the qualities of the thing. It may be simple yet inefficient; it may be easy to learn yet difficult to practise; it may be brief but illegible.

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out. Language is simplified. Problems are stated in present-day conditions of home or business life. Graphs, charts, curves are more and more used. A great Chicago daily publishes a diagram showing changes within a week in wheat prices. Such devices should be made familiar in so practical a subject as arithmetic.

In his grammar school edition this author is distinctly up-to-date in using a variety of graphical devices, approved mathematical terms, existing business conditions in the arithmetical work.

**The Brown Mouse.**

By Herbert Quick. Cloth, 310 pages. Price, \$1.25, net. The Bobbs-Merrill Co., Indianapolis, Ind.

A novel dealing with an educational problem has a difficult way to travel on the road to success. If it is to meet the approval of the professional educator, it must state directly or by inference, correct pedagogical principles. If it is to meet the larger favorable criticism of the general reader who cares little about education as a science, it must possess those elements of interest in the shape of plot, characterization, narrative style, dialog and those indefinable human elements which are so necessary even in a moderately successful "seller".

The Brown Mouse seems to combine all the elements of a good educational novel. Jim Irwin tackles a very real educational problem when he sets out to banish formalism and tradition from the Woodruff district school; to connect arithmetic, reading and geography with the every day life and problems of a farming community; and to introduce agriculture by such practical problems as seed and soil testing, stock judging, milk testing, etc. His struggles with the reactionary school board members who employed him simply to break a deadlock and who persecuted him during his term, might happen in any

typical school district east of Colorado. The success of the educational program in the story has been proven more than once in the north-central states. Its definite conclusion contributes as much to the happy ending of the book as does the love story which is interwoven with the main plot.

Jim Irwin's school may be far from perfect and his program far from supplying a complete education. Still, we cannot help but believe that all our rural schools would be benefited immeasurably if they did as well as the Woodruff school.

The book should be read by every teacher who would truly enrich the work of the country school.

**The Tree Fairy.**

By Minna B. Noyes. Cloth, 202 pages. Parker P. Simmons Co., 3 East 14th St., New York, N. Y.

Thirty-two happy fairy tales from the inexhaustible storehouse of German folk literature have been translated and adapted for American children. The translator is a primary teacher of many years' experience, and she has produced a volume that lacks nothing in literary style, freshness or interest because of the care exercised in limiting the vocabulary and the form of the stories to the needs of the lower grades. All of the stories have been tried out in several schools and have been found to be most acceptable. The typographical makeup and the illustrations suggest the gift book rather than the school book.

**Panama and Its Bridge of Water.**

By Stella Humphrey Nida. 196 pages. Price, \$0.50. Rand, McNally & Co., New York.

What well-informed American citizen has not thrilled time and again in reading of the triumphs of American grit and ingenuity, over nature and disease, in the inception, development and completion of the Panama Canal. The present little book presents the achievements of

our statesmen, engineers and financiers in compact form and tells in several introductory chapters, the history of the isthmus and of the early attempts to dig an ocean-to-ocean waterway. We are still too close to the event to permit of an authoritative evaluation of the work performed by the several great men contributing to the success of the canal project. The author's care to praise all very equally makes the book particularly adapted to school use. For geography, current history and civics classes, the book will be interesting as it is timely.

### IMPORTANT EDUCATIONAL LITERATURE.

**School Report, Meriden, Conn., 1914-15.** Prepared by David Gibbs, Supt. Contains very complete statistics and a discussion of current problems.

**The Extension of Public Education.** By C. A. Perry. United States Bureau of Education, Bulletin 655. A very complete discussion of the wider use of school buildings from the administrative viewpoint.

**Schoolhouse Sanitation.** By Wm. A. Cook. United States Bureau of Education, Bulletin 648. A study of the laws and regulations governing the sanitation, lighting, fire protection, ventilation, cleaning, furniture and equipment of schoolhouses. This bulletin seeks to emphasize the best regulations as a suggestion for school authorities and architects.

### A Correction.

An item printed in the November issue stated that dictionaries are "textbooks" according to a ruling of the attorney general of Michigan. The item should read: "Dictionaries are not 'textbooks' and consequently do not come within the law that compels book concerns who want to sell to public schools in the state of Michigan, to file prices with the state superintendent of Michigan.



### THE STANDARD SCHOOL BUDGET.

A splendid illustration of the vagaries of school budgets and of the possibilities of the standardized budget is given in the survey report of the Ashland, Ore., schools. This report, which was published in October, contains in parallel columns an outline of the local classification of accounts and a suggested classification based on the plan of the United States Bureau of Education.

Ashland Budget Classifications, 1915-1916		U. S. Bureau of Education Standard Classifications.	
<b>A. Fixed yearly charges</b> .....		<b>1. Administration</b> .....	
1. Fuel:		1. Superintendent .....	
a. Wood .....		2. Clerk and census .....	
b. Oil .....		3. General expense .....	
c. Kindling .....		<b>2. Instruction</b> .....	
2. Light .....		1. Salaries .....	
3. Telephone .....		Principals .....	
4. Water .....		Teachers .....	
5. Sinking fund .....		2. Educational supplies .....	
6. Interest .....		Office:	
7. Insurance .....		Stationery .....	
8. Freight, Teleg. ....		Postage .....	
9. Clerk and census .....		Printing .....	
<b>B. Salaries</b> .....		Drawing .....	
1. Superintendent .....		Penmanship .....	
2. H. S. Principal .....		Agric. ....	
3. Grade Principal .....		Man. Tr. ....	
4. H. S. Teachers .....		Dom. Sc. ....	
5. East S. Teachers .....		Dom. Art. ....	
6. West S. Teachers .....		Chem. ....	
7. Janitors:		Physics .....	
a. High School .....		Phy. Geog. ....	
b. West Side .....		Biology .....	
c. East Side .....		Primary .....	
<b>C. Office</b> .....		Crayon, Pa- per, etc. ....	
1. Postage .....		<b>3. Operation of School Plant</b> .....	
2. Stationery .....		1. Janitors' sal. ....	
3. Printing .....		2. Janitors' supplies .....	
<b>D. School Supplies</b> .....		a. Floor oil .....	
1. Drawing .....		b. Disinfectant .....	
2. Penmanship .....		c. T. paper .....	
3. Agriculture .....		d. Other .....	
4. Man. Training .....		<b>4. Fuel</b> .....	
5. Cooking .....		4. Water .....	
6. Sewing .....		5. Light .....	
7. Chemistry .....		6. Phone .....	
8. Physics .....		<b>5. Maintenance of School Plant</b> .....	
9. Phys. Geog. ....		1. Repairs to build- ings and upkeep of grounds .....	
10. Biology .....		2. Insurance .....	
11. Primary .....		<b>6. Library</b> .....	
12. Janitor .....		1. Books .....	
13. Crayon .....		<b>7. Outlay—Capital</b> .....	
14. T. paper .....		Acquisition	
15. Theme paper .....		1. Land .....	
16. Disinfectants .....		2. New buildings .....	
17. Floor oil .....		3. Equipment, new buildings .....	
<b>E. Apparatus</b> .....		4. Alterations, old buildings .....	
1. Typewriters .....		5. Equipment, old buildings .....	
2. Library .....		6. Educational Equipment .....	
3. Maps and globes .....		<b>7. Other payments:</b>	
4. Dictionaries .....		1. Interest .....	
5. Incidentals .....		2. Debt reduction .....	
<b>Repairs</b> .....		3. Sinking fund .....	
1. H. S. Roof .....			
2. West Side Roof .....			
<b>G. New Equipment</b> .....			
1. Drawing tables .....			
2. Sewing tables .....			
3. Commercial .....			
4. Stools, 3 doz. ....			
5. Playground .....			

#### Summary.

A. Fixed expenses .....	\$12,660	1. Administration .....	\$ 2,200
B. Salaries .....	27,720	2. Instruction .....	25,875
C. Office supplies .....	250	3. Operation of school plant .....	4,795
D. School supplies .....	2,240	4. Maintenance of school plant .....	1,000
E. Apparatus .....	1,850	5. Library .....	300
F. Repairs .....	750	6. Outlay .....	2,100
G. New equipment .....	550	7. Other payments .....	9,750
	\$46,020		\$46,020

Commenting on the standard system, the report declares that it "is the best system yet devised, and is capable of expansion as the school system grows, and hence will not have to be changed from year to year. A standard classification of expenditures becomes more valuable each year because it makes possible the comparison of expenditures of one year with those of another, and with those of cities of similar size.

"The purposes for which school funds are expended are so nearly alike in all school systems, whether great or small, that standardization in school accounting is a comparatively simple problem. Every expenditure of school money can be classified under one of the following divisions: Administration, instruction, operation of school plant, maintenance of school plant, acquisition of plant or equipment, and fixed charges and contributions, and these have come to be regarded as the standard classification for school purposes."

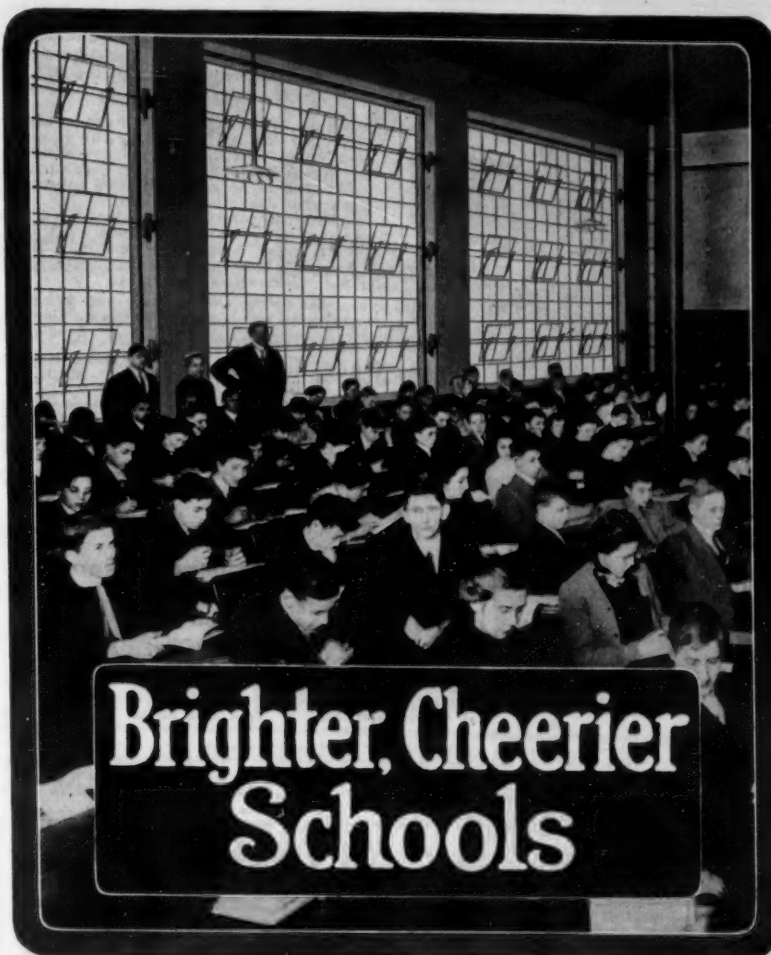
#### RULES FOR THE CONDUCT OF FIRE DRILLS.

The state fire marshal of Iowa has recently issued a bulletin containing suggestive rules for fire drills in public schools. The rules are intended to develop careful and prompt execution on the part of the teachers and pupils. They include a "study for life, not for school," and seek to prevent panics and loss of life in case of fire.

The rules read:

"Require the pupils to pass into and out of the room in an orderly manner at all times. It is assumed that this is insisted upon in all of our graded schools. If it is not it should be.

"Each teacher should first practice with her pupils to see how quickly they could leave the room in an orderly manner by the nearest exit. They may march to music if there is an instrument in the room or in the hall or keep step with the class bell. The main points are first, order; next, rapidity.



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—With extra protection against fire from within or without.

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Build That School This Winter—and Avoid the Spring Rush. Save Time—Save Money.

Investigate. Send for our new pamphlet, "Better School Building."

**DETROIT STEEL PRODUCTS CO.**  
Dept. L 13  
Detroit, Michigan

#### Urbana High School

Urbana, Ind.—Showing recent installation of Fenestra Solid Steel Windows.

#### View of Schoolroom

in Urbana High School—showing how flood of daylight is brought in at pupils' left.

#### Pennsylvania Training School

Morganza, Pa. Note how Fenestra Windows daylight the whole interior.







THERE is a great difference in School Desks, altho to the casual observer all desks are alike. This is not true and we would like an opportunity of showing you the superior construction of the HANEY SCHOOL DESKS, or any other School or Church Furniture that we make.

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## Ideal Book Covers



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"After each teacher has found the most orderly and quickest way of passing out the pupils of her room, she should then be ready to act in harmony with the principal of the building and should follow his or her directions explicitly."

"In the larger buildings, it is well to have a gong or a special bell in the hall, the sound of which will mean to every child that a fire drill is on."

"At the sound of this gong every pupil in the building should stand, and at the signal from the teacher the marching should begin."

"The teachers in charge of the rooms on the first floor should not lose a second after the general fire gong is sounded in giving a signal for marching out, and the children should be given directions to go to the nearest exit."

"Those occupying rooms on the second floor should start within a few seconds after those on the first floor have started, and by the time they reach the last landing of the stairway to the first

floor the first floor should be clear. If the building is a three-story building the same general directions should be observed in clearing the rooms of the third story."

### Avoid Crowding.

"Care should be exercised that there be no crowding and that only such a number be permitted to enter the stairway at one time as can easily pass down. If the stairway will accommodate not more than two or three pupils abreast, only that number should be allowed to march together; if wide enough for more, a larger number should be arranged for. In many smaller buildings with few exits and narrow stairways, single files are preferable."

"Provision should be made not only for clearing the building when all pupils are in the study room, but when they are scattered thruout the building in the smaller rooms for recitation. Be prepared for prompt, systematic action at any hour or minute of the day."



### SCHOOLHOUSE SANITATION.

Forty states of the Union have taken some legal action toward safeguarding the sanitation of public school buildings, according to a bulletin on "Schoolhouse Sanitation," issued in October, 1915, by the Bureau of Education of the U. S. Department of the Interior.

"Probably nine-tenths of the existing regulation of this sort has come within the past decade," declares the bulletin. "Each state profits by the experience of 47 others. A law passed in one extreme of the country today is copied next month or next year by a state 2,000 or 3,000 miles distant."

Thirty-eight states have some legal provision

regarding the school site, according to the bulletin. Nearly all of these provisions are statewide in their application, and are mandatory in character. These provisions include the proximity of "nuisances," availability of the site, and size of the site. Nineteen states have laws prohibiting the location of school buildings within a specified distance from places where liquor is sold, from gambling houses, houses of prostitution, and noisy or smoky factories.

Thirty of the states have sought to regulate the water supply of the public school. "The revolt against the common drinking cup," says the bulletin, "has come within the past five years. Kansas was the pioneer, but other states followed rapidly, so that now half of the entire number

have either a law or a regulation regarding drinking cups."

Some form of protection against fire and panic is found in 36 states. Blanket regulations, or the power to make such regulations, exist in 12 states. General or special construction with a view to fire prevention is dealt with in 10 states. Thirteen of the states have something to say as to corridors and inner stairways; 24 have regulations as to exits, and 25 as to exterior escapes; 10 mention alarm and fire-fighting apparatus; and 11 states provide by law or regulations for fire drills. Less than half the states, according to the bulletin, have any legal word on ventilation. Thirty cubic feet of fresh air per pupil per minute is the conventional amount specified.

In the matter of cleaning and disinfecting, slightly more than one-fourth of the states have regulations which control conditions to any degree outside the districts themselves. Some of the laws and regulations are almost model; others are wholly inadequate. A few state boards of health have done notable work in this particular. Special cleaning and disinfecting follow in seven states immediately upon discovery in any school of any of a certain class of diseases. "Three of the states have a special list of specific diseases that call at once for action. This list includes scarlet fever, smallpox, and diphtheria, in all three states, measles in two, and infantile paralysis, epidemic spinal-meningitis, and bubonic plague, in one each."

### SCHOOL HYGIENE NOTES.

Taunton, Mass. A dental clinic has been established in the Cohannet School to care for all children who are in need of dental treatment. Parents who can pay for dental work may take their children to the family dentist.

Granite City, Ill. A health survey of the schools was recently conducted by a nurse employed by the board. A regular school nurse has been employed on full time to look after the general health of the pupils and to be on the watch for threatened epidemics of disease.

Bay City, Mich. The special supervisor in charge of the examination of backward children



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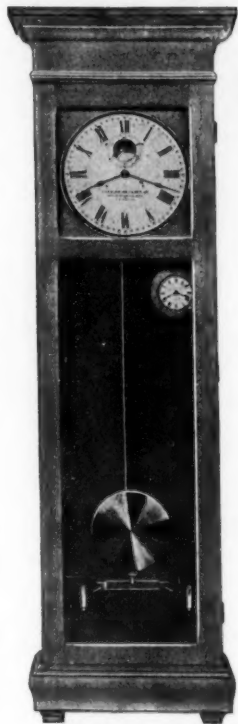
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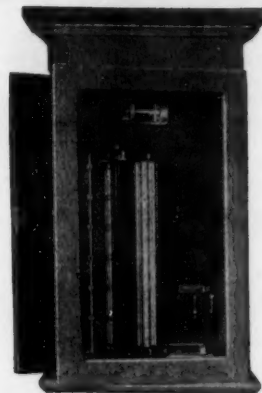
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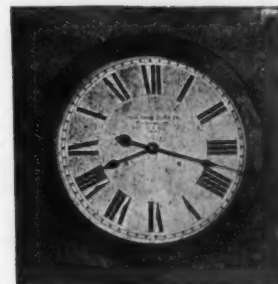
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recently made a statement to the effect that backwardness in school work is in many cases due to physical defects. In the order of occurrence these defects are poor teeth, defective vision, nasal obstruction and poor physical condition.

A state-wide Disease Prevention day was held in the public schools of Indiana on October 7th. All of the grade schools held short exercises and talks were given by the principals. Attention was directed to the benefits to be derived from the employment of a school physician.

Supt. C. C. Green, in the preliminary report to the Board of School Directors of Beaver Falls, on the question of high school athletics, made the following recommendations:

(a) That physical training should be placed on a co-ordinate basis with intellectual training, and that it be placed under the jurisdiction of the Instruction Committee of the board and the superintendent of schools.

(b) That all receipts from athletic contests, rental of the field, gymnasium, etc., be turned over to the treasurer of the school district.

(c) That all payments be authorized by the Board of Directors.

(d) That the rules and regulations governing athletic contests be revised to meet new conditions.

(e) That as soon as practical a director of physical training be employed for twelve months each year.

Lake Charles, La. A recent inspection of school children by the district health officer showed that out of 1,477 children, 1,362 or over 92 per cent were suffering from some defect. It was also shown that these children had a total of 3,451 defects, or an average of nearly three to each child. Of the total number examined, 607 had serious defects and 209 very serious defects. The largest number of defects were those of vision, teeth, tonsils and general physical ill-health. The inspections were begun last winter with the co-operation of the police jury, the parish school board and the state board of health. Parents are advised of the health of their children, and medical attention is given free where the family is unable to pay for the treatment. Up to the present time, eighteen white schools have been visited.

West Pottsgrove, Pa. A medical inspector has been appointed.

St. Louis, Mo. A report of the medical inspection department of the schools for the year ending June, 1915, shows that 33,795 of the 99,229 pupils enrolled had physical defects. Of this number 1,055 have been operated upon and 25,625 cases have not been treated. The inspectors discovered 3,016 cases of communicable diseases.

Milwaukee, Wis. The finance committee has recommended that the board establish a Department of School Nurses. The department is to be under the direction of the School Hygiene Department and is to consist of a head nurse and ten assistants. Nurses who have been engaged in sociological or government work will be accredited for service to the extent of one year less than the actual time employed in such service.

Springfield, Ill. The supervising nurse of the public schools, at the opening of the fall term, issued instructions to mothers concerning the health of the children and the prevention of contagion. The following instructions have proven helpful:

1. Examine children before sending them to school in the morning, and note the conditions. Note the common symptoms of illness: colds, flushed faces, swollen, reddened or inflamed throats, vomiting and fever.

2. Note especially the throats. If at all red or inflamed, keep the child at home, off the street and away from other children for 24 or 48 hours. If no better at the end of that time, keep other children at home from school and call a physician.

Pawtucket, R. I. A six years' trial of medical inspections in the public schools has proven successful according to a recent report of the inspectors. There has been no epidemic of disease; general hygienic conditions have been greatly improved, the buildings have been kept cleaner and the children come to school with clean faces, hands and teeth; good standing and sitting positions have been maintained; ventilation by means of windows is enforced; rest exercises are regularly held in the lower grades and in the grammar grades; teachers have been trained to keep the rooms at a proper temperature. The most recent innovation has been the assignment of a visiting nurse and the payment of a fixed sum for each visit made to a home. The purpose is to acquaint the parents with the nature of the

illness when the children are sent home, and to suggest the proper treatment.

Chicago, Ill. The first municipal psychopathic clinic has been opened at the Iroquois Hospital for the care of mental defectives. The clinic will co-operate especially with the public schools. Teachers may send defective pupils to the clinic to be examined. Parents will be notified of the recommendations of the physicians.

Philadelphia, Pa. The elementary schools committee of the board has selected a site upon which to erect a building for the instruction of tubercular pupils.

Philadelphia, Pa. A dental hygiene week was held beginning November 4th, to stimulate interest in the care of teeth. The subject received further attention during the convention of the Home and School League in the William Penn High School. An exhibition of office equipment, tooth paste and other dental appliances was on display in the corridors of the building.

Calro, Ill. Two nurses have been employed to look after the health of school children. The nurses entered upon their duties December first. The expense will be borne jointly by the school authorities and the Metropolitan Life Insurance Company.

## PEACE PRIZE CONTEST.

The American School Peace League has announced its annual Peace Prize Essay Contest for the year 1915-16. It is open to all normal and secondary school pupils thruout the country.

Two sets of prizes, to be known as the Seabury Prizes, are offered for the best essays on one of the following subjects:

1. The Opportunity and Duty of the Schools in the International Peace Movement. Open to Seniors in the Normal Schools.
2. The Influence of the United States in Advancing the Cause of International Peace. Open to Seniors in the Secondary Schools.

Three prizes of \$75, \$50 and \$25 will be given for the best essays in both sets.

Information concerning the conditions of the contest and literature on the subject may be obtained from the Secretary, Mrs. Fannie Fern Andrews, 405 Marlborough St., Boston, Mass.

The contest will close March 1, 1916.



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### CLOW'S SCHOOL PLUMBING PAM- PHLET.

Messrs. James B. Clow & Sons, Chicago, have just issued the fourth edition, 1915-16, of their well known pamphlet, "Modern American Schools: Plumbing Fixtures." The pamphlet is a rather formidable catalog of toilet, urinal, lavatory, sanitary drinking and other plumbing fixtures for school use. Especial attention is devoted to a list of sinks and other fixtures for domestic science rooms, laboratories, school laundries, etc. These latter fixtures are almost without exception entirely new and should receive wide adoption.

In proof of the advanced types of school fixtures of Clow design and make, the pamphlet closes with 22 pages of photographic reproductions of schoolhouses equipped with Clow products. These include many of the finest schools erected in the United States since the publication of the third edition of the pamphlet.

Interested readers of the JOURNAL may obtain copies by addressing J. B. Clow & Sons, Harrison Street Bridge, Chicago.

### NEW VICTOR RECORDS.

The Victor Talking Machine Company has just completed four reproductions of a series of English country dances for school use. These records will constitute one of the most important series of folk dances, and will ultimately include all of the best music of that type used in England. The records are being made under the personal supervision of Mr. Cecil J. Sharp, director of the English Folk-dance Society and a leading student and exponent of modern and historical English country dances. The greatest care is being exercised to insure the presentation of



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every tone in its purest and rhythmical form and at its normal tempo.

Information concerning the records may be had from the Educational Department of the Victor Talking Machine Company, Camden, N. J.

### AUTOMATIC COMPANY MOVES.

The Automatic Pencil Sharpener Company, Chicago, has moved its offices to the Garland Building at 58 East Washington Street. The new location offers greatly enlarged facilities.

### A MAP BOOK.

A. J. Nystrom & Company have just issued a pamphlet descriptive of the newly completed series of Sanford American History Maps.

The pamphlet, which is fully illustrated in colors, describes in detail the thirty-two maps comprised in the Sanford series and includes valuable suggestions for the use of maps as an integral part of history teaching. Copies of the pamphlet will be sent to any reader of the SCHOOL BOARD JOURNAL who will request it.

### MORE WORLD'S RECORDS BROKEN IN TYPEWRITING.

At the International Typewriting Contest held at the Annual Business Show, New York City, October 25, 1915, Miss Hortense S. Stollnitz, a student in the Bay Ridge High School, Brooklyn, N. Y., broke all previous records in the Novice Class by sixteen words per minute, making a record of 114 words per minute net, for fifteen minutes, writing from copy. The second on the list, Mr. William D. Miller, made a record of 108 words per minute net, and the third, Mr. George Zeihl, made a record of 107 words per minute net. All three of these writers learned touch typewriting from Charles E. Smith's "Practical Course in Touch Typewriting" (Isaac Pitman & Sons, New York). Such records for one-year students were never dreamed of a few years ago.

GLAUBER'S NEW BUBBLER BOOKLET. A new booklet on Sanitary Drinking Fountains, has just been issued by the Glauber Brass Mfg. Co., of Cleveland.

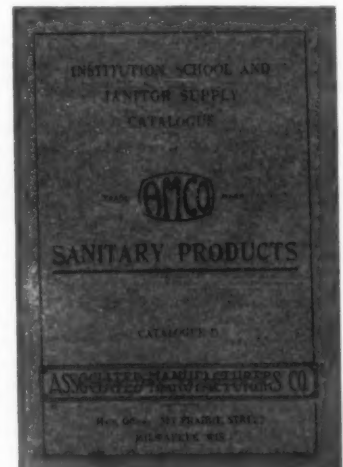
Within the pages are illustrations and descriptions of twelve distinct types of drinking fountains, especially designed for school use. The pamphlet makes very clear three distinguishing

features of all Glauber sanitary fountains. First, the design is such that the users' lips cannot come in contact with the jet from which the water issues and the drain prevents mingling of the waste water with the upward stream of water. Second, positive regulation of the water supply is provided, and, third, the best porcelain and nicked brass are used in all fountains.

A copy of the booklet will be sent gratis to any reader of the JOURNAL. Address the Glauber Brass Mfg. Co., of Cleveland.

### BUYERS' GUIDE ON SANITARY PRO- DUCTS.

The Associated Manufacturers Company of Milwaukee, have just issued a complete catalog on Sanitary Products for School Buildings. School



authorities will find sections of the catalog devoted to detailed description on brushes, dusters, brooms, disinfectants, soaps, paper towels, rubber hose, sprinklers, sanitary fluids, and glass tops for domestic science tables. Six pages of the catalog are devoted to Drinking Fountains and Fixtures.

This catalog is a valuable guide for school authorities, particularly since every article is

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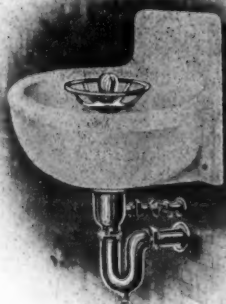
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### THE MINNESOTA ASSOCIATED SCHOOL BOARD SECTION.

The Associated School Board Section of the Minnesota Education Association met for its annual convention on October 27th at Minneapolis.

The meeting opened with an address by President A. O. Forsberg who made some appropriate and helpful remarks. Mr. Forsberg urged the appointment of a committee which should get every school district represented at the Section meetings. He said this was the last session he would attend as president as he was no longer eligible to any office; but he stated that he would always have the interest of the Section at heart.

Mr. C. C. Swain, Rural School Commissioner, gave an interesting address on education in the rural schools. He said: "Give every boy and girl in the country as good an education as those in the city; consolidate the district schools into union graded schools; unite your forces so that you may have the right kind of schools."

Mr. G. A. Foster of Willmar, gave an instructive paper on "The New Law as Applied to the Associated Schools." Under the law, associated districts cannot vote more than two mills to the central district; no district farther than four miles from the central school, and no district having less than eight months' school, may become associated. Mr. Foster urged that the districts spend the amount given by the state for the maintenance and extension of industrial work.

Mrs. H. Witherstine gave a report of the Junior-Senior High School in Rochester as it has been operated during the past two years. Mrs. Witherstine spoke particularly of the success of departmental work, its power to reduce "repeating" and to keep children longer in school. The number of these schools in the United States has increased from five in 1912, to 68 in 1914, six of which are located in Minnesota.

State School Building Commissioner S. A. Challman of Minnesota gave a helpful talk on "Modern Tendencies in High School Design."

He called attention to the accepted standards for sizes of classrooms, for proper lighting and for adequate ventilation. The talk was accompanied with slides of many school buildings in Minnesota, and with data showing the construction, arrangement and total cost of each building.

Mr. Adkins of Aurora, read an able paper on "The Old Order Changeth," taking up particularly the subject of Physical Training. He spoke of the changes and improvements in the present physical training courses in schools and urged the all-round development of all the students, physically, mentally and morally. Mr. Adkins, in his paper, did not criticize athletics for certain men and boys, but he did condemn the practice of limiting these games to a part of the students. He urged that a thoro course of training be maintained for the benefit of all students.

A discussion on "Changing School Books" by the members, followed Mr. Adkin's paper.

At the business meeting the officers for the coming years were elected: President, Mr. J. M. Malmin, Blue Earth; Vice-President, Mr. O. G. Mason, Remers; Secretary, Mrs. H. Witherstine, Rochester; Treasurer, Mr. E. C. Erb, Red Wing.

A resolution was adopted that the president appoint a committee to prepare and send out circular letters to get a large representation at the section meetings. The committee included Mr. J. M. Malmin, Mr. Victor Lawson and Mrs. H. Witherstine.

### COMING CONVENTIONS.

Dec. 4—New England Mathematical Teachers' Association at Boston, Mass. Prof. J. L. Coolidge, Pres., Cambridge, Mass.

Dec. 8—Association of Presidents of Universities, Colleges and Normal Schools of Montana, Idaho and Washington at Spokane. Dr. S. B. L. Penrose, Pres., Walla Walla, Wash.

Dec. 11—New England Association of English Teachers at Boston. F. W. C. Hersey, Secy., Cambridge, Mass.

Dec. 20-22—Utah Educational Association at Salt Lake City. J. P. Widtsoe, Secy., Salt Lake City.

Dec. 26-28—American School Improvement Association at Cincinnati. Wm. E. Chancellor, Secy., Wooster.

Dec. 27-28-29—New Jersey State Teachers' As-

sociation at Atlantic City. Dr. Wm. A. Wetzel, Pres., Trenton.

Dec. 27-29—New York Academic Principals' Association at Syracuse. Edward P. Smith, Secy., N. Tonawanda.

Dec. 27-29—Western Oregon Teachers' Association at Medford. W. M. Smith, Secy., Salem.

Dec. 28-30—Florida Educational Association at Tallahassee. R. L. Turner, Secy., Inverness.

Dec. 28-30—Illinois State Teachers' Association at Springfield. R. C. Moore, Secy., Carlinville.

Dec. 28-30—Modern Language Association of America at Cleveland, O. W. G. Howard, Secy., Cambridge, Mass.

Dec. 28-30—National Music Teachers' Association at Buffalo. J. Lawrence Erb, Pres., Chicago.

Dec. 28-30—Pennsylvania State Teachers' Association at Scranton. J. P. McCaskey, Secy., Lancaster.

Dec. 28-31—National Commercial Teachers' Federation at Chicago. E. E. Jones, Secy., Chicago.

Dec. 28-31—Wyoming Teachers' Association at Thermopolis. Miss May Hamilton, Secy., Casper.

Dec. 29-30—Ohio School Improvement Federation at Columbus. Supt. W. N. Beetham, Secy., Bucyrus.

The high school students of Aberdeen, S. D., on November 13th, took over the publishing of the "Aberdeen Daily American." Every line of local news items and editorials in this issue of the newspaper were gathered and written by the students. The school authorities do this once every year to give the students practical experience in newspaper writing and in the use of practical English.

Mr. W. E. Hoover, Superintendent of Schools at Fargo, has announced his candidacy for the office of State Superintendent of Public Instruction for North Dakota. Mr. Hoover is an Ohioan by birth and has spent many years in the west. He has been located in North Dakota during the past 26 years and has taken a prominent part in North Dakota school affairs.

Columbus, O. The citizens, in November, voted on a special levy of six-tenths of a mill for the use of the schools in making up partially for the deficit created by the action of the budget commission in slashing the budget.



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### TEACHERS AND SCHOOL ADMINISTRATION.

A recent report of the board of trustees of the teachers' insurance and retirement fund of Wisconsin shows that there are now 10,543 educators enrolled as members of the organization, and 118 of them are now receiving annuities after having served the required number of years in the state. Those who have taught 25 years are eligible to annuities of \$300, and those who have taught 30 years to annuities of \$450.

There are 7,694 country teachers who are members of the retirement association and pay into the retirement fund. In Dane County there are 255 members, 108 of whom are from the city of Madison.

The report gives the total resources of the fund as \$356,809.92, which is drawing interest at 4½ per cent.

The University of Michigan, Ann Arbor, Mich., has introduced an extension course in the Detroit schools for the benefit of teachers and principals. The sessions are held Saturday mornings in the Central High School. The subjects are philosophy, history, English and fine arts. In addition, there are evening classes for principals and teachers. These classes are conducted by Mr. Curtis, Supervisor of Educational Research, and are held two evenings each week.

Louisville, Ky. Between 25 and 30 teachers, who have retired from the public schools since the passage of the teachers' annuity fund law, have received checks from the trustees of the fund. The teachers who received the benefits of the fund were divided into three classes: Those who have taught between twenty and thirty years, those who have retired since that time because of ill health, and still another class who have taught between thirty and forty years or over.

Struthers, O. The board has adopted rules for the conduct of teachers. The rules read:

Teachers must be in their rooms at 8:30 a. m. and must remain until 4 p. m., with one hour for dinner.

Teachers must be in their rooms at intermission unless absent with their pupils.

Teachers may not inflict corporal punishment except in the presence of the principal of the building.

Approximately one-fourth of the 19,000 teachers

in the schools of Michigan are beginners each year, or in other words, there is a yearly demand in the state for nearly five thousand instructors. To supply the demand for adequately trained teachers, the legislature has passed a law requiring that inexperienced instructors shall acquire a normal training before they are granted teachers' certificates. The act reads:

"No certificate shall be granted under the provisions of this act to any person who shall not have completed a term of at least six weeks' work in professional training in a state normal school or in one of the county normal training classes of the state or any normal training school conducted by any municipality in the state, or in any school approved by the state superintendent of public instruction; but the completion of one-half year of work in a school maintaining four years of work above high school rank shall be accepted in lieu of this requirement. This proviso, however, shall not apply to persons who have taught in the schools of the state for at least five months prior to July 1, 1916."

Washington, D. C. The school board has made a ruling that no teacher or other employee of the school department shall hold more than two positions in the schools. At present several persons are teachers in the day schools, directors of playgrounds and teachers in the evening schools.

Buffalo, N. Y. The Buffalo Normal School has begun an experimental extension course for teachers. The classes are held on Saturday mornings and instruction is offered in the special problems which confront the teacher. To accommodate the teachers who may wish to come from the surrounding district, it has been decided to hold three morning sessions, each of which will be one hour in length. The subjects now being discussed are geography, writing, principles of teaching, primary methods in English, arithmetic, drawing, music, and work in the household arts.

Philadelphia, Pa. Training courses for teachers of school garden work have been begun at the William Penn High School. The courses are arranged for beginners and for advanced students and are under the direction of Supt. John Garber and Physical Director William Stecher. A fee of \$1 is required for local school teachers and students of the Normal Training School.

According to estimates recently prepared by State Supt. F. G. Blair of Illinois, the state ten years from now will be appropriating an average of about \$600,000 for the pensioning of teachers. The estimates are based upon statistics collected from fifteen representative counties.

It was found that in these counties, of the 3,870 teachers who had taught in 1914, 229 had taught 25 years or more and 145 had reached the age of 50 and had taught 25 years. In other words, 3.7 per cent of the teachers are eligible for pensions and retirement.

With this as a basis, it was estimated that 851 teachers were eligible for retirement when the pension law went into effect in July last. Each of these may receive an annuity of \$400, part of which is paid by the state and part by the teacher before retirement. This would make the pension fund disbursements \$240,000 to begin with, provided all who are eligible should qualify.

Making allowances for lapses, and counting the amount paid in by the teachers, it is estimated that there will be 1,700 inhabitants by July, 1925, and that \$680,000 will be paid out in pensions that year. Of this, the state will pay \$570,000 and the teachers the balance.

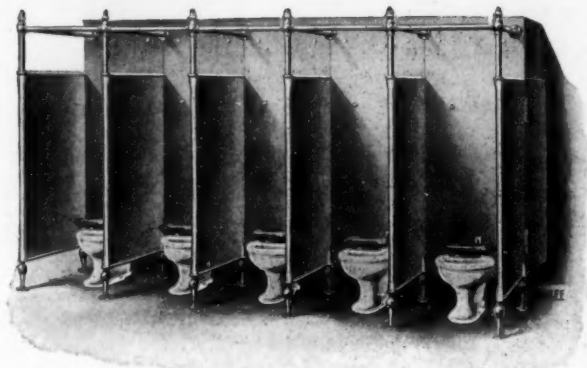
Attorney General Owen of Wisconsin has rendered an opinion to the effect that the state board of education has not exclusive control over the finances of the common schools, the Stout Manual Training School, county training schools, county schools of agriculture, and continuation schools, in the same degree that it has over the finances of the university and normal schools. The attorney general points out that the law specifically appropriates the money of the university and normal schools subject to the supervision of the board, but does not do so with reference to the other institutions.

In a further opinion on the new Wisconsin law regulating the sale price and method of supplying school texts, Mr. Owen holds that books must be sold at the lowest price prevailing in any part of the country. He holds that publishers cannot discriminate against Wisconsin in the matter of prices.

The opinion is broad and makes clear that the law intends to take no account of the number of books purchased or of adoptions or contract conditions in other states.



# Mr. Superintendent and School Board Members



## SUPPOSE —

we talk over the proposition of Plumbing Fixtures for your New School Building, or the installation of New Fixtures in your old School Building.

There may be a slight doubt in your mind as to the superiority of Our Goods when we tell you that our fixtures are the BEST.

Of course we don't expect you to take our word, simply because we say so, BUT

## WE CAN PROVE IT!

Here are a few facts regarding the manufacture of Wolff Closets.

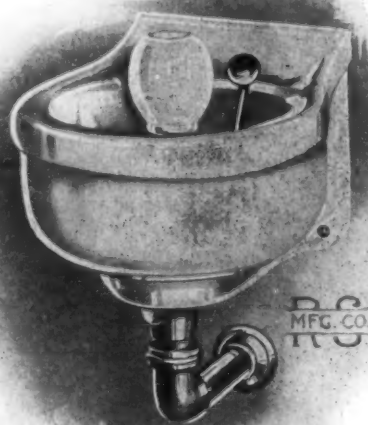
1. They are sanitary in every respect.
2. They answer all requirements of the State Law.
3. We are the only concern that carry a complete line of Plumbing Goods exclusively.

Enough Data and Proof can be given to convince any reasonable person that WOLFF Fixtures are all that we claim them to be.

Branches  
TRENTON  
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DALLAS  
DENVER  
ST. LOUIS  
WASHINGTON

# THE L. WOLFF MANUFACTURING CO.

601-627 WEST LAKE STREET, CHICAGO



## 90% OF THE PUBLIC SCHOOLS

install Bubbler Drinking Fountains *exclusively*. Sanitation is a most vital factor in the equipment of all School buildings.

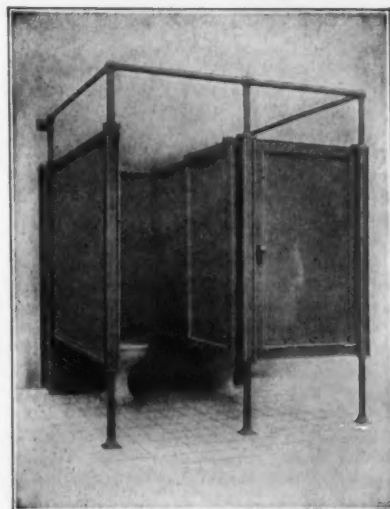
## RUNDLE-SPENCE BUBBLER DRINKING FOUNTAINS

are especially designed and manufactured for school use. They are neat in appearance, and GUARANTEED to give entire satisfaction.

Consult us on your Drinking Problems. We shall be more than pleased to assist you.

**RUNDLE-SPENCE MFG. COMPANY**  
MILWAUKEE, WIS.

## MORE SANITARY — LESS EXPENSIVE



The Verdict of those who have adopted the

**NOKORODE**  
Vermin Proof

## Closet Partitions

Made from PURE IRON; Rust Resisting, Corrosion Defying Metal.

A staunch, sturdy, dependable product; offering advantages both in the installation and service, not to be realized in the use of stalls constructed from other materials.

It will be necessary to carefully study details and specifications covering the "Nokorode" Sanitary Closet Partition, to gain a full appreciation of its *value* and understand its comparative *low cost*.

It has many distinct mechanical features; such as special adjustable floor flanges, permanently tight interlocking joints (rivetless) and reinforced posts.

Furnished without doors when desired.

Equally adapted for *Latrines, Dry or Individual Closets and Shower Stalls.*

You can have full information for the asking

**Henry Weis Cornice Co.**  
KANSAS CITY

Write for  
Special Bulletin describing  
**WEISSTEEL**  
SASH  
FOR SCHOOLS





### IF YOU NEED PORTABLE SCHOOL BUILDINGS

### WHY NOT GET THE BEST?

OUR school houses are in use by School Boards in twenty-one States and Territories. They have double walls, thoroughly insulated, are well ventilated, dry, warm and sanitary. Are SECTIONAL and PORTABLE: Can furnish record and locations of several that have been moved and re-erected seven and eight times each. Any size: Open air and two rooms when desired.

SEND FOR OUR PLANS AND PRICES

AMERICAN PORTABLE HOUSE CO.

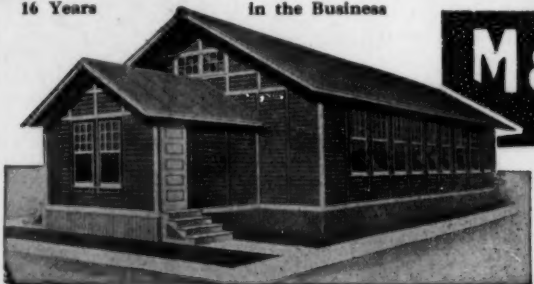
3081 Arcade Building

SEATTLE, WASH.



16 Years

In the Business



## M & M PORTABLE READY-BUILT BUILDINGS

### Complete Ready To Set On The Foundation

Our rapidly growing cities and towns with restricted school revenues, find it difficult to build new schoolhouses fast enough to keep up with the demand made by the increase in population. ON SHORT NOTICE and at a VERY SMALL COST, we are furnishing many of the different towns and cities in the United States with our PORTABLE READY BUILT SCHOOL HOUSES with seating capacity 50 to 250. When shipped from our factory, they are ready built and complete, ready to set on the foundation. No carpenter work of any kind to be done to them as every piece is finished and fitted. We send a printed illustrated instruction sheet for erecting the schoolhouses and attached to same is a floor plan on which all of the parts are numbered and those in the packages numbered to correspond with those shown on the floor plan. When erected, they are as strong and substantial in every way as if built by a local carpenter, day work. They are thoroughly ventilated and all of the windows arranged so as to give perfect light. We GUARANTEE ENTIRE SATISFACTION. We will be pleased to furnish names of the different towns and cities now using them. Write and let us send you a blue print and full detailed information.

MERSON & MORLEY CO., No. 1 Main St., Saginaw, Mich.

## Bossert Redibill Schools

### School Houses That Are More Than Portable

We have made portable school houses for other people for over 25 years. Now you can buy Bossert Redibill School Houses with all our new patents and improvements direct from us and save money for your school board.

Each section is made with air chambers—cool in summer—warm in winter. Any one can put them together with no other tool but a monkey wrench. Sections come in three foot units—painted two coats outside and oiled inside—fine hardware attached.

We are equipped to furnish any size building on short notice. Prices of same depend on requirements and State Laws—but in every case are the lowest for quality of material supplied. Remember, this is not a cut lumber proposition, and the cost of erecting is a very small item. While not essential, as any unskilled labor can do it, we will if you desire, arrange to erect all buildings. Buildings can be taken down and re-erected any number of times without marring a single feature.

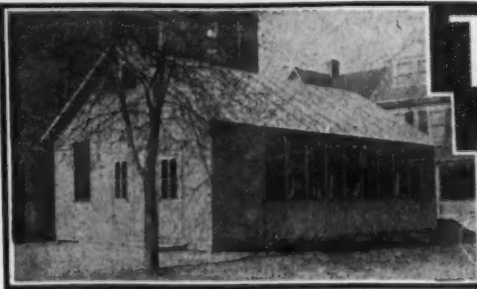
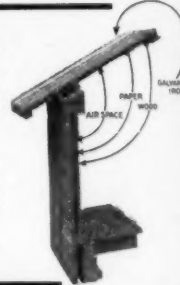
Write us full requirements and we will send details of cost of building completely erected.

LOUIS BOSSERT & SONS

Builders of School Houses for over 25 years.

1323 Grand Street

Brooklyn, N. Y.



## THE ARMSTRONG COMPANY

### SECTIONAL SCHOOL BUILDINGS

The ARMSTRONG SECTIONAL SCHOOL BUILDINGS are complete in every detail, having double floors, double side walls and ceiling. With every modern convenience makes them the best PORTABLE SCHOOL BUILDINGS on the market today. With the perfect lighting and ventilation, they are without equal. It is the only building that can be taken down and moved to another location without mutilating some of the parts. We can prove it. If you will write us what you desire, we will send you full details. We are specialists in Sectional School construction. THE ARMSTRONG COMPANY, P. O. 401, ITHACA, NEW YORK.

OUR PLANS  
APPROVED  
BY YOUR  
STATE BOARD  
AND MEET EVERY  
REQUIREMENT  
OF YOUR  
BUILDING CODE

### A NEGLECTED PHASE IN TEACHING SAFETY.

(Concluded from Page 18)

neglected to heed the warnings of their parents against the perils of the railroads, and by sending the children as missionaries preaching to the voters at home the need for the state legislatures to pass and the magistrate to enforce a strict law against trespass. They should regularly warn their pupils against walking on tracks or bridges, or crossing tracks without stopping, looking and listening, or of stealing rides on cars or engines, or of playing on turntables.

An admirable example of the way in which the anti-trespass campaign among children is being waged is found in the little pamphlet being circulated by the El Paso and South Western Railway, entitled "Harry Hop-the-Train." The tragic results of Harry's persistence in hopping freight trains, the arrival of the ambulance with the Doctor and his bag filled with knives and saws, the operating room in the hospital, with its glass cases around the walls "full of shining knives," the steel operating table on which Harry is placed while his mangled leg is removed, and the subsequent release of the little cripple who could never again join his playmates in the old swimming hole, are related with a simplicity of expression well calculated to make a vivid impression on the child mind.

#### State School Superintendents Join Anti-Trespass Campaign.

Good work in bringing home the dangers of railroad trespass is already being done in other states by teachers in the public schools. Anti-trespass lessons are regularly given in the New York and Brooklyn schools as a result of the efforts of the American Museum of Safety, which has prepared the lessons in pamphlet form, vividly outlining the danger and folly of using the railroad tracks as a highway or a playground. In New York also Safety Patrols have been organized selected from the older and most responsible boys and girls who are charged with the duty of looking after the safety of younger children on the streets and going to and from school.

Dr. Fred L. Keeler, Michigan State Superintendent of Public Instruction, has published a

number of safety-first bulletins, illustrated with photographs, showing the dangers of railroad trespass. These bulletins are addressed "To the Boys and Girls of Michigan" and contain the following warnings in large type:

Do not cross tracks without stopping, looking and listening to see whether a train is coming.

Do not play on or around turntables.

Never take chances. The safe course is always the best and the quickest in the long run.

Be on the alert.

Get the Safety Habit.

Practice it every minute.

The Ohio law provides that "It shall be the duty of each teacher in the public schools of the state to devote not less than thirty minutes in each month during the time such school is in session for the purpose of instructing the pupils thereof as to ways and means of preventing accidents," and a similar provision is contained in the laws of Virginia.

Frank A. Miller, State Superintendent of Public Instruction of Ohio has published a "Guide to Safety" of which the following is an extract: "A farmer boy about 14 years of age, riding a freight train from one station to another for the fun of riding, fell and lost both legs and both hands."

"A street circus was shown in a small country Missouri town; all the children and nearly all the grown-ups were watching the circus; grown men and women got on flat cars located on railroad tracks near the circus and the children flocked there also. An engine working 600 feet away started to switch cars. Three children between the ages of ten and twelve were knocked off the cars and their legs cut off."

"In the capital city of Illinois, little girls from six to ten years of age were playing upon private property of railroads in the sight of several women. Some were striking at cars of a freight train that was passing; one of them six years of age, attempted to catch hold of a stirrup of a car, was jerked under car; legs cut off."

By just such simple stories as these the teachers of the United States can impress upon their pupils the suffering which may result from heedlessly wandering on railroad property.

### EVENING SCHOOLS.

Fort Wayne, Ind. A course in automobile repairing has been introduced in the evening vocational classes. Fifty men have enrolled for the course.

Tacoma, Wash. A free commercial course is offered in the evening school. The course is arranged in two sections, one for the preparation of beginners, and one for advanced students.

Saginaw, Mich. The evening classes for boys offer the following subjects: General machine shop practice; plumbing and steam-fitting; electrical work; woodwork and cabinet-making; mechanical drawing. The girls' classes will be given instructions in the following subjects: Plain sewing, dressmaking, millinery.

Omaha, Neb. The board has permitted the use of five schools three nights each week, for five months, for social center work.

Springfield, Mass. The evening schools at the Technical High School and the Commercial High School opened with classes in mechanical drawing, machine shop work, mathematics, plumbing, woodwork and patternmaking, electricity, millinery, sewing, dressmaking, domestic science and cooking, and applied design. The largest enrollments were in the departments of mechanical drawing, machine shop work, electricity, millinery and sewing.

Newton, Mass. The trades classes for men at the evening vocational school offer instruction in machine drawing, shop calculation, architectural drafting, bench and lathe work, toolmaking and electrical work.

Jackson, Mich. Evening classes have been formed in manual training, stenography, drawing Spanish, electricity, cooking and sewing.

Woonsocket, R. I. Courses in freehand drawing, sewing and domestic science have been introduced in the evening school.

Flint, Mich. Evening classes in mechanical drawing, carpentry, cabinetmaking, patternmaking, molding, woodturning, cooking and sewing are offered in the Central High School and the Dort School.

Haverhill, Mass. A commercial course has been introduced in the evening school. The course is limited at present to bookkeeping and high school arithmetic.





# "The Modern School Makes Clow the Rule"

The following incomplete list proves this statement.

These cities installed

## Clow Plumbing Fixtures in their schools

Birmingham, Ala.	5	Ft. Wayne, Ind.	6	Albert Lea, Minn.	5	Akron, Ohio	9
Eureka, Calif.	5	Indianapolis, Ind.	12	Austin, Minn.	5	Cincinnati, Ohio	7
Los Angeles, Calif.	10	La Fayette, Ind.	9	Crookston, Minn.	7	Cleveland, Ohio	8
Pasadena, Calif.	5	Terre Haute, Ind.	7	Duluth, Minn.	11	Fremont, Ohio	5
Riverside, Calif.	5	Wabash, Ind.	6	Faribault, Minn.	6	Sandusky, Ohio	5
San Diego, Calif.	5	Des Moines, Iowa.	12	Fergus Falls, Minn.	6	Toledo, Ohio	10
San Francisco, Calif.	10	Iowa City, Iowa.	10	Hibbing, Minn.	11	Muskogee, Okla.	9
Denver, Colo.	14	Ottumwa, Iowa.	7	Mankato, Minn.	8	Salem, Oregon	5
Washington, D. C.	77	Sioux City, Iowa.	5	Minneapolis, Minn.	5	Pottsville, Pa.	5
Atlanta, Ga.	14	Waterloo, Iowa.	7	Rochester, Minn.	5	Scranton, Pa.	7
Bloomington, Ill.	6	Battle Creek, Mich.	6	St. Paul, Minn.	20	Uniontown, Pa.	6
Chicago, Ill.	12	Bay City, Mich.	6	Virginia, Minn.	6	Sioux Falls, S. D.	5
Jacksonville, Ill.	10	Flint, Mich.	8	St. Louis, Mo.	19	Salt Lake City, Utah.	6
Pana, Ill.	8	Grand Rapids, Mich.	8	Sedalia, Mo.	9	Eau Claire, Wis.	5
Pekin, Ill.	6	Holland, Mich.	5	Reno, Nev.	6	Green Bay, Wis.	5
Peoria, Ill.	24	Iron Mountain, Mich.	7	Bayonne, N. J.	5	Madison, Wis.	8
Rockford, Ill.	12	Jackson, Mich.	7	East Orange, N. J.	5	Racine, Wis.	17
Springfield, Ill.	16	Kalamazoo, Mich.	14	Elizabeth, N. J.	5	Sheboygan, Wis.	6
Sterling, Ill.	5	Lansing, Mich.	12	Newark, N. J.	27	Superior, Wis.	5
Crawfordsville, Ind.	5	Pontiac, Mich.	6	Schenectady, N. Y.	5		

\* Indicates number of schools equipped with Clow Plumbing.

M-1864—"METRIC"  
Concealed Tank, Local Vent

In some cases the Clow Automatic showed a saving of 75% in water

All Clow Fixtures are especially designed for the modern school

Send for Modern American Schools No. 111

**James B. Clow & Sons** CHICAGO  
Established 1878

SALES OFFICES  
NEW YORK MINNEAPOLIS MILWAUKEE ST. LOUIS KANSAS CITY  
LOS ANGELES SAN FRANCISCO

### SCHOOL CREDITS FOR HOME WORK. (Concluded from Page 21)

not wish to do so, so that no one can complain on that score, but we find the number who desire to co-operate is rapidly increasing.

#### Opposition to Home Credits.

Do all parents approve of the plan and co-operate heartily? The following letter written to the President of the Board of Education, will perhaps answer the question: "The enclosed card was given my daughter. After careful consideration of the contents, I am returning it to the Board of Education trusting you will take such action upon it as to make further effort on my part unnecessary. I wish it distinctly understood that I will not permit interference or any suggestion of the spirit of dictation in the arrangement of the hours at the disposal of my child other than those designated as school hours. The contents of this card are ridiculous and an offense to the intelligence of our Poughkeepsie motherhood. If you allow the system to be established in the public schools of Poughkeepsie, you will have given your endorsement to a manifestly unjust, impossible, and impracticable socialistic scheme." This letter in view of the fact that the plan was already in operation and that no one is required to take part in the matter who does not wish to, is just a little outcropping of human nature which, of course, we all meet on occasions. The cards which we use in our city explain in full the operation of the plan. Objections may be raised, faults may be discovered, but to date I feel that we have made no mistake in starting the work, and I feel that we have taken a very distinct step forward.

The extent to which school credits should be granted for home work, and the manner of administering the system, is indicated by the accompanying card.

Rules Governing Credit for Home Duties.  
Every Friday afternoon, a Home Duties Record Slip will be given to each child. Beginning with Monday, all time spent by a pupil in home duties should be entered in the proper space.

POUGHKEEPSIE PUBLIC SCHOOLS						
School No. _____	Grade _____					
HOME DUTIES RECORD						
of _____						
For week ending _____	191 _____					
	MINUTES					
	Mon.	Tues.	Wed.	Thurs.	Fri.	Total
1. Work in garden .....						
2. Cleaning yard .....						
3. Sprinkling lawn .....						
4. Mowing lawn .....						
5. Sweeping sidewalk .....						
6. Shoveling snow .....						
7. Care of heater .....						
8. Washing .....						
9. Ironing .....						
10. Mopping .....						
11. Bedroom work .....						
12. Dusting .....						
13. Housecleaning .....						
14. Preparing meals .....						
15. Other kitchen work .....						
16. Washing dishes .....						
17. Caring for baby .....						
18. Carrying lunches .....						
19. Carrying clothes .....						
20. Running errands .....						
21. Caring for sick .....						
22. Repair work .....						
23. Care of animals .....						
24. Bringing smaller children to school .....						
25. Home sewing .....						
26. Paper routes .....						
27. Helping in store .....						
28. Practicing music lessons .....						
29. Care of automobiles .....						
30. Any other important duty not listed above .....						
I certify that the above is a correct record.						
(Over)	Signature of Parent or Guardian.					

Each Monday morning, a slip filled during the previous week should be returned to the teacher. The slip must be signed by the parent or guardian as an assurance that a correct record has been kept.

Any duties not listed, but of value to the parents, may be counted, and the nature of the duties specified in the blank spaces.

Home duties credits will count as much in the promotion of a child as any regular subject in the school, and the pupil will be marked on a scale of one hundred for actual work of not less than thirty minutes per day.

Home duties and home work should not be confused. The preparation of school lessons at home is called home work. The items listed on the reverse page are called home duties, in order to keep separate the two lines of work.

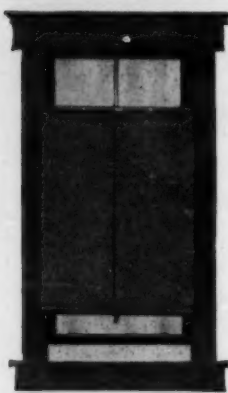
#### COMMUNITY MUSIC IN DES MOINES.

A community course in music is being tried out for the first time thru the agency of the public schools of Des Moines, Iowa, where free instruction is provided for all persons interested in music. This latest community betterment plan includes also the 18,000 school children enrolled, and is expected to inspire a greater desire for a musical education on the part of many of the city's 105,000 citizens who heretofore have had few opportunities for pursuing such a study.

Old-fashioned singing schools have been restored in several communities, the organization of ten community music centers being one of the first things to be undertaken by the school board. Each community will have its own orchestra, as will also the two important night schools, while each afternoon during the week a special corps of instructors will give violin lessons to the school children. A nominal fee of 15 cents a lesson will be charged for this service, but otherwise this new work will be carried on without cost to those participating. The supervisors of music in the schools will assist Director of Music W. A. White in directing the work of the community centers.

Each Saturday morning Director White will lecture in a downtown theater on some phase of music, these talks treating with some of the compositions to be played during the engagements of the municipal music course. At the close of the year the best musicians from each of the community center orchestras will be drafted to form one great orchestra, which will present a part of the program at the annual spring music festival. Frequent concerts will be given during the school season by some of the community orchestras.





## FOOL THE SUN

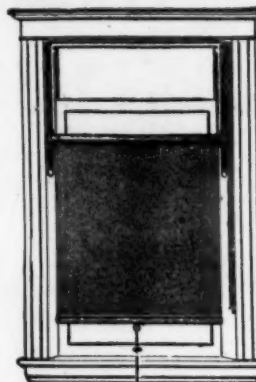
By installing Draper's Cotton Duck Adjustable Window Shades. We guarantee our shades to be Sun Proof.

At this particular time of the year the Sun is not so hot, but the constant glare affects both the eyes of the Teacher and Pupil.

Draper's Cotton Duck adjustable Window Shades hang evenly, are durable, and always give the best of service.

Write today for all particulars.

**LUTHER O. DRAPER SHADE CO.,** Spiceland, Ind.



## THE SIM-PULL SHADE REGULATOR

Practical—Effective—Inexpensive  
Fits Any Shade or Window

"The only device of the kind now being sold and recommended by leading Window Shade and School Supply concerns."

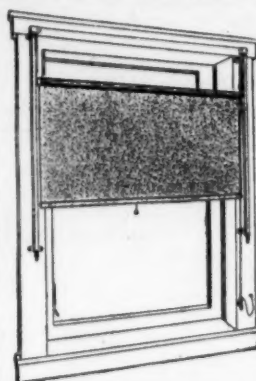
Supplied in lengths of 15, 30 and 45 inches respectively

**WHITCOMB & BOYCE, Mfgs.**  
1421 S. Trumbull Ave. CHICAGO, ILL.



**JOHNSON'S WINDOW SHADE ADJUSTERS** are the standard fixture for Schools. Most simple and durable in construction, hold the shade roller firmly at any height and work equally well on any Cloth Shade. For new or old buildings. Sold thru leading dealers or direct. School Boards (in market) can have free full size sample adjuster. Economical in cost, also in saving shade from wear.

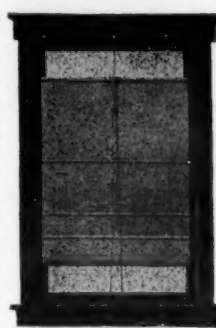
R. R. JOHNSON, Mfr., 7208 Eberhard Ave., CHICAGO, ILL.



**THE WIMMER Shade "Adjuster"** for lowering shade from the top, for upper light and ventilation in the class room offices, etc.

**C. I. Wimmer & Co. MFRS.**  
Columbus, O.

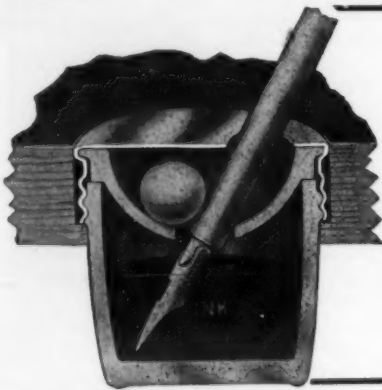
## Sanitary Lighting and Automatic Folding



The Famous **S.L. & A.F. SHADES** Made of DUCKING Cloth. Have NO SPRING ROLLER. Fold to ONE-SIXTH their area at one operation. Act at both top and bottom ends. Have the fewest parts, never get out of order. Act most rapidly and last longest. Handled by leading Supply Houses everywhere, or address **OLIVER C. STEELE MFG. CO.** SPICELAND, IND.



**FRAMPTON'S Famous Adjustable Window Shades** No UP-TO-DATE school or public building is complete without means for perfect ventilation and shade. These adjustable shades are made of cotton duck; are serviceable, beautiful and simple; are EASILY OPERATED by a single cord passing thru our patented pulley, which is absolutely automatic. **Shade Cannot Fail** Interesting booklet, giving details, mailed upon request. Agents wanted. **FRAMPTON MADE** means AIR and SHADE Manufactured by **Frampton Window Shade Co.** Pendleton, Ind. Box 252



A wonder of the inventive age.

## SQUIRES SELF CLOSING INKWELL

Here is a perfect inkwell that will give satisfaction, try it and you will use no other.

A few of its good points.

Always closed, requires filling but once or twice a year, Economical, Durable, Sanitary, Ball cannot be removed, is practically Dust Proof and Air Tight; is flush with the top of the desk and nickle plated.

Write for sample and prices on our full line.

**SQUIRES INKWELL CO.**

941 Liberty Ave.

--

Pittsburgh, Pa.

## GLEE CLUBS



**WASHBURN** Banjos, Mandolins and Guitars, at Club Prices. Have been the leaders for fifty years.

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## SCHOOL ADMINISTRATION IN NON-COMMISSION GOVERNED CITIES.

(Continued from Page 13)

In nine cities the superintendent recommends dismissals, and the board of education dismisses teachers. Quoting statements regarding three of these cities:

Chicago: Superintendent "must bring charges before Board for dismissal."

Detroit: Superintendent "recommends to Committee on Teachers and Schools. They in turn recommend to the Board of Education which has full power."

Los Angeles: "Dismissals are made on recommendation of the Superintendents and the Teachers and Schools Committee."

The board of education has complete power to dismiss teachers in three cities. As New York expresses it, "Dismissals are wholly in the hands of the Board."

In three cities the superintendent dismisses teachers with the approval of the board of education. In Cleveland the charges must be approved by the board.

In Buffalo teachers can be removed by the superintendent, but only after a hearing before the Mayor and with his concurrence.

In five cities the superintendent has full power to dismiss teachers, but in three (Cincinnati, Indianapolis, and Toledo) the teacher may appeal to the board of education from the decision of the superintendent.

Three cities contributed no statement regarding the superintendent's relation to the dismissal of teachers.

### Summary:

Teachers dismissed

By board of education on recommendation of superintendent..... 9

Chicago	Los Angeles
Philadelphia	Minneapolis
Detroit	Seattle
Milwaukee	Rochester
Newark	

By board of education..... 3  
New York City Kansas City (Mo.)  
San Francisco

By superintendent, approved by board of education ..... 3  
St. Louis Cleveland  
Boston

By superintendent, with concurrence of mayor ..... 1  
Buffalo

By superintendent ..... 5  
Cincinnati Columbus  
Indianapolis Toledo

No statement ..... 3  
Pittsburgh Louisville  
Baltimore

### Conclusion.

If this study of school administration in non-commission governed cities be compared with the facts relating to commission governed cities, as given in the November issue of the SCHOOL BOARD JOURNAL, a close similarity in school administration under the two types of municipal government is at once apparent. It is evident that in the larger cities of the country the same methods of managing the schools are practiced,

and in about the same proportion, whether the cities are governed under the federal or the commission form of government.

We may infer that commission government has not settled the moot points of city school administration, for under such government we find the same variations in the legal organization of the school system that we find under the older forms of city government.

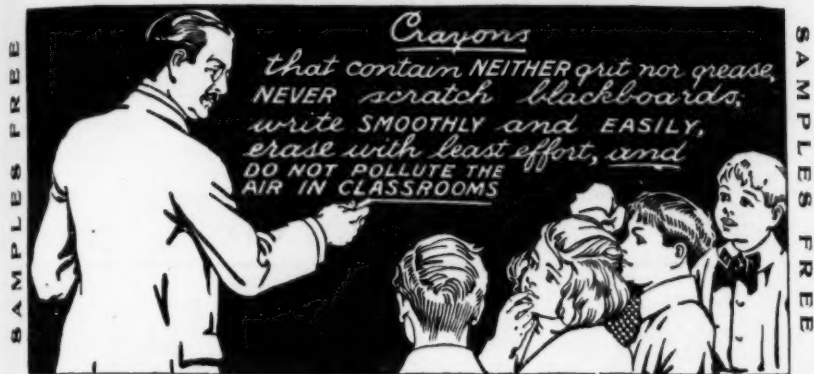
For example, shall the board of education be appointed or elected? Eminent educational authorities are divided in their opinion, many favoring the appointed board, others favoring the elected board. Turning to our charts on school administration, we find that among the non-commission governed cities seven boards are appointed and sixteen are elected, while among the commission governed cities six boards are appointed and seventeen are elected—surely not a sufficient difference to warrant any conclusions. The advocates of the commission form of government therefore have not determined that one method of selection of school board members is superior to that of the other.

Again, shall the members of the board of education be paid for their services? Commission government, the originated in behalf of the principles of economical and efficient administration has so far neither proved nor disproved the wisdom of having unpaid boards. For the 24 commission governed cities have three paid boards of education, as compared with four in the 24 non-commission governed cities.

Nor have educators succeeded in winning the commission form of government to a greater



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support of either separate or co-ordinate school systems. For the number of separate school systems in the 24 cities under commission government is the same as that in the 24 cities under the old form of government. That is, commission government, as in operation in the 24 largest commission governed cities, has not tended to abrogate the principle that the school system shall be separate from other municipal activities.

Indeed, the charts show that two more cities under commission government are free from control by the mayor or city council than in non-commission governed cities.

In the matter of deciding appropriations for the use of schools, the commission governed cities in a larger number of instances give the board of education the right to determine what sums shall be raised for school purposes.

In conclusion, variations in educational administration appear to be as common among large non-commission governed cities as among large commission governed cities. The one ideal system has apparently not yet been found, certainly not universally or even extensively adopted. The creators of the commission government idea, much as they may have contributed to general municipal progress, have not yet developed and adopted a superior method of administering school affairs. Perhaps this fact indicates that from the principles already found in our educational systems the ultimate, simple, practicable, efficient and universally adaptable system may eventually be evolved.

#### A MANUAL TRAINING BUILDING.

Factory design and construction, modified and refined, to express the educational character of the activities accommodated are finding favor with both architects and school authorities in

planning separate buildings for school shops. An example of a very practical and pleasing factory design is the Eveleth Manual Training Building occupied for the first time in February, 1915, and devoted entirely to the boys' Manual Training Department of the Eveleth High School. The building stands close to the main high school building and measures 137 feet by 83 feet. It is faced on the outside with gray pressed brick and gray terra cotta to conform to the finish of the high school.

The building is constructed entirely of reinforced concrete and, except for wooden floors in several of the rooms, contains no inflammable material. It is as nearly fireproof as it is possible to make a building.

The construction and finish of the building is of the factory type thruout. The interior walls are gray brick and tile, carefully laid up, and the floors and ceilings are of reinforced concrete. The building is wired thruout for electric power and light and is heated by means of a steam vacuum system.

The basement extends only under one wing and is sufficient only for a general toilet room and for the fuel and boiler rooms.

The first floor includes a large machine shop measuring 34 feet by 40 feet, a forge shop of the same size, a foundry, two woodworking rooms each 34 feet by 40 feet, stock and finishing rooms, an exhibition room and a locker room. On the second floor there are a large drafting room 34 feet by 52 feet in size, an electrical laboratory, a print shop, a plumbing shop, an elementary woodworking department, a lecture room, an office and three small auxiliary rooms. All of the rooms on the second floor have in addition to the large steel fenestra, auxiliary skylights.

The building is equipped with machinery and tools of the best commercial type. Not only ordinary manual training courses for the elementary grades and the high school are offered

but also vocational courses in printing, electrical work, machinshop practice, foundry and forge work, plumbing, carpentry and cabinet-making.

The building was designed by Messrs. Bray & Nystrom, Duluth, Minn., and was completed at a total cost of \$48,000.

#### THE NEW EL PASO HIGH SCHOOL.

(Concluded from Page 26)

employed. An automatic clock system for programs will be installed.

The capacity of the school will be about 1,200, and it is so arranged that boys and girls can be taught in separate classes, especially in work pertaining to the industrial arts. The building will be large enough, for a few years, to house both the junior and senior high schools. As the senior high school grows, the junior department will be transferred to another building, or rather to two buildings situated in the north and south sides of town respectively. The administration plans to add two years of College work, and a Normal department also, as soon as other quarters can be provided for the students of the junior high school.

One of the unique features of the school will be the stadium, with a seating capacity of 10,000, and ample space for baseball, football, and track athletics. This stadium will have immense possibilities for the people of El Paso in the form of conventions, pageants, and athletic events of all kinds.

Adjoining the high school grounds on the north, the city has also purchased two blocks of land, including "Scenic Point," for a city park, and the proposed scenic drive will skirt the mesa and the edge of this park.

The building, was designed by Messrs. Trost and Trost, of El Paso, who have made a careful study of the best high schools in this country. This school, however, will be built to meet the needs of the people of El Paso.

## The Norton School House Holder Check

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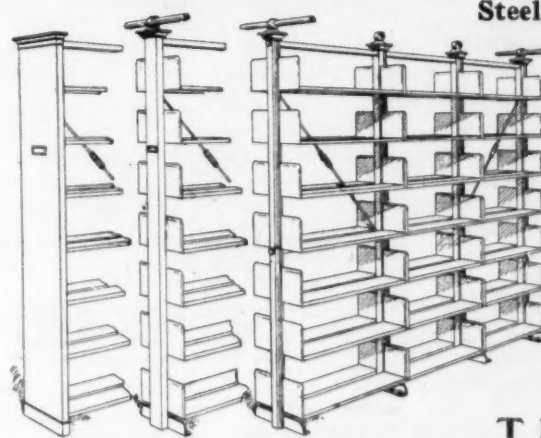
Approved by National Board of Fire Underwriters

### "Safety First"

The Norton 4 valve, 2 speed Holder Check is especially adapted for School House doors. Uniform speed is the safe way to close a door. No latches needed. Doors close steadily and absolutely without noise. Held open at any angle required.

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Pupils in the Public Schools use "Eagle" Pencils because they are "Made in the United States," and give the best satisfaction.

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### EAGLE PENCIL CO.

NEW  
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#### Discovered.

A college student was hauled before the dean for exceeding his leave.

"Well?" said the professor.

"I'm awfully sorry," said the under-graduate. "I really couldn't get back before. I was detained by important business."

The dean looked at him sternly.

"So you wanted two more days of grace, did you?" he asked.

"No, sir," answered the young man, off his guard for the moment—"of Marjorie."

#### The Canny Scot.

Andrew Carnegie's story of a Scots boy, which the *Weekly Telegraph* prints, well illustrates his countrymen's power to see quickly every circumstance that may operate to their advantage.

The boy's grandmother was packing luncheon for him to take to school one morning. Suddenly, looking up in the old lady's face, he said, "Grandmother, does yer specs magnify?"

"A little, my child," she answered.

"Aweel, then," said the boy, "I wad just like it if ye wad take them off when yer packin' my lunch."

#### An Illiteracy Test.

"Now, sir," said the examining officer, "in what language are the novels of Harold Tinkle Bell written?"

"Heaven only knows, I don't," said the candidate for naturalization.

"Correct," said the examiner. "Admitted. Next!"

#### Pure Country Air.

A professor in an educational institution of this city was examining some students in hygienic science.

"The great city agglomerations vitiate the atmosphere," he said. "Morbiferous germs, escaping from inhabited interiors, contaminate the air roundabout. In the country, however, the atmosphere remains pure. Why is that, Jones?"

"Because," said Jones, "the people in the country never open their windows."—*N. Y. Times.*



#### Candid.

Pater—Why did you fail in your last exams?

Son—They asked questions that were utterly beyond my seat-mate's depth.—*Puck.*

#### The "Common Sense" of One Boy.

"My pupils don't learn like parrots—they use their common sense," writes a teacher. "Let me tell you a grand instance of this. I was trying to tell my class some mark by which they could remember each of the great poets. I said, over and over again: 'The poet Milton was blind.' The stupidest boy in the class should have remembered that, but he didn't. 'Milton, the poet, was blind,' I repeated. Now, before you forget it, what was Milton's great misfortune?"

"He was a poet!" said the stupidest boy.

"Our college won."

"It did? Rah! Rah! What did it win?"

"The debate."

"Oh, pshaw!"

#### His Economy.

A mother came upon her young son enjoying a feast of bread and butter and preserve.

"Jimmie," she asked, "don't you think it is a bit extravagant to eat butter with that fine jam?"

"No'm," grinned Jimmie. "It's economical, really. You see, the same piece of bread does for both."

#### Apt Pupil.

The Visiting Teacher—You know, Mrs. Bloogs, it seems a shame to take your boy away from school at such an early age. I myself didn't finish my school education until I was 23.

Mrs. Bloogs—Well, some children is quicker at pickin' up things than others.

#### The Funny Side of Exams.

The following selection of mistakes in examinations may convince almost any one that there are some peaks of ignorance which he has yet to climb:

"Mute, inglorious Milton." These epitaphs are used by a writer who was envious of Milton's being Poet Orient.

Magna Charta said that the King had no right to bring soldiers into a lady's house and tell her to mind them.

Shakespeare made a mistake in mentioning Galen, who did not live till a hundred years after his time.

Panama is a town of Colombo, where they are trying to make an isthmus.

The three highest mountains in Scotland are Ben Nevis, Ben Lomond and Ben Jonson.

Wolsey saved his life by dying on the way from York to London.

"Those melodious bursts that fill the spacious days of great Elizabeth" refers to the songs that Queen Elizabeth used to write in her spare time. Tennyson wrote a poem called Grave's Energy.

The Rump Parliament consisted entirely of Cromwell's stalactites.

The plural of spouse is spice.

"The Deserted Traveller" is the most famous of Goldsmith's works.

The Pyramids are a range of mountains between France and Spain.

The gods of the Indians are chiefly Mohammed and Buddha, and in their spare time they do lots of carving.

Prof. Weather—Mr. Crocker, give the definition of a lady.

Crocker—A feminine biped is a lady.

Maples (butting in)—Professor, that might be a hen.



#### Unavailing Equipment.

"Professor Thinkum speaks seven different languages."

"Yes," replied Miss Cayenne. "But nobody takes much interest in what he says in any of them."

A second grade teacher had difficulty in getting the children to distinguish between Miss and Mrs. They would insist on saying one when they meant the other. Finally, to make the distinction more clear, she said, "John, what is the difference between Miss and Mrs.?"

Whereupon John, one of the slowest children in the room, startled her with the answer, "Mister."

#### The Teacher's Theory Shattered.

"Children," said the teacher to his pupils, "you should be able to do anything equally well with either hand. With a little practice you will find it just as easy to do anything with one hand as it is with the other."

"Is it?" inquired the urchin at the foot of the class. "Let's see you put your left hand in the right-hand pocket of your trousers."—*Ladies' Home Journal.*

Teacher: What are the three words you use most?

Senior: I don't know.

Teacher: Correct.

#### Recognized.

First old Teacher: "I saw an old pupil of mine today, one that has become a millionaire."

Second Old Teacher: "Did he recognize you?"

First Old Teacher: "I guess so. He turned a corner when he saw me coming."

"I thought your father wasn't going to send you back to college?"

"That's so. Dad did kick on the expense, but I threatened to stay at home and help run the business, and then he decided that a college course would be a lot cheaper."

"Who can tell me what causes thunder?" the teacher asked.

"One cloud slaps another one in the face, and then they both begin to cry," opinioned little Fred.



# Educational Trade Directory

The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms

## ADJUSTABLE WINDOW SHADES.

Oliver C. Steele Mfg. Co.  
L. O. Draper Shade Co.  
Frampton Window Shade Co.  
The Aeroshade Company.

## AIR SCHOOL FURNITURE.

Empire Seating Co.

## ART MATERIALS.

Binney & Smith.  
Eagle Pencil Co.  
American Crayon Co.  
Devoe & Raynolds.  
Thos. Charles Co.

## ATHLETIC FIELD APPARATUS.

Fred Medart Mfg. Co.  
W. S. Tothill.

## AUDITORIUM SEATING.

Haney School Furniture Co.  
Peabody School Furniture Co.  
E. W. A. Rowles.  
American Seating Co.  
Peter & Volz Co.  
Steel Furniture Co.  
N. J. School & Church Furn. Co.  
Heywood Bros. & Wakefield Co.  
Empire Seating Co.

## BATTERIES—STORAGE.

Stanley & Patterson, Inc.

## BLACKBOARDS—COMPOSITION.

N. Y. Silicate Book Slate Co.  
American Seating Co.  
E. W. A. Rowles.  
Peckham, Little & Co.  
Beaver Board Companies.

## BLACKBOARDS—NATURAL SLATE.

Keenan Structural Slate Co.  
Penna. Struct. Slate Co.  
Albion Bangor Slate Co.  
Crown Slate Co.  
Excelsior Slate Co.  
Granville Hahn.  
Jackson Bangor Slate Co.  
E. J. Johnson.  
Lehigh Slate Mfg. Co.  
North Bangor Slate Co.  
Parsons Bros. Slate Co.  
Phoenix Slate Co.  
M. L. Tinsman & Co.  
Thomas Zellner.

## BOOK COVERS.

Holden Patent Book Cover Co.  
Peckham, Little & Co.

## BOOK PUBLISHERS.

A. J. Barnes Pub. Co.  
Ginn & Co.  
D. C. Heath & Co.  
Macmillan Co.  
Isaac Pitman & Sons.  
Silver, Burdett & Co.  
Christopher Sower Co.  
Rand McNally & Co.  
Lyons & Carnahan.  
Phonographic Institute.  
Funk & Wagnalls Co.  
G. P. Putnam's Sons.  
G. & C. Merriam Co.  
Parker P. Simmons Co.  
Houghton Mifflin Co.  
J. B. Lippincott Co.  
Longmans, Green & Co.  
Bobbs-Merrill Co.  
Chas. E. Merrill Co.

## CRAYONS.

Binney & Smith.  
National Crayon Co.  
American Crayon Co.  
E. W. A. Rowles.  
Peckham, Little & Co.  
Peter & Volz.  
Associated Mfrs. Co.

## DEAFENING QUILT.

Samuel Cabot.

## DEODORIZERS.

American Sanitary Products Co.  
West Disinfecting Co.  
Associated Mfrs. Co.

## DICTIONARIES.

G. & C. Merriam Co.

## DISINFECTANTS.

American Sanitary Products Co.  
Theo. B. Robertson Soap Co.  
West Disinfecting Co.  
Associated Mfrs. Co.

## DOMESTIC SCIENCE EQUIPMENT.

Grand Rapids Hand Screw Co.  
E. H. Sheldon & Co.  
Kewaunee Mfg. Co.  
Economy Drawing Table Co.  
C. Christiansen.  
Columbia School Supply Co.  
Leonard Peterson & Co.

## DOOR CHECKS.

Norton Door Check Co.

## DRAFTING ROOM FURNITURE.

Grand Rapids School Equip. Co.  
E. H. Sheldon & Co.  
Economy Drawing Table Co.  
C. Christiansen.

## DRINKING FOUNTAINS.

L. Wolff Mfg. Co.  
Jas. B. Clow & Sons.  
N. O. Nelson Mfg. Co.  
Rundle-Spence Mfg. Co.  
American Sanitary Products Co.  
Associated Mfrs. Co.  
Glauber Brass Mfg. Co.

## ERASERS.

E. W. A. Rowles.  
Peckham, Little & Co.  
Peter & Volz.  
Associated Mfrs. Co.

## ERASER CLEANERS.

American Seating Co.

## FIRE ALARM SYSTEMS.

Holtzer-Cabot Electric Co.  
Stand. Electric Time Co.  
Fire Alarm Signal Co.

## FIRE ESCAPES.

Dow Wire & Iron Works.  
Minnesota Manufacturers Assn.

## FIRE EXIT LATCHES.

Vonnegut Hdw. Co.

## FIRE PROOF DOORS.

Dahlstrom Metallic Door Co.

## FIREPROOF WINDOWS.

Detroit Steel Products Co.

## FLAGS.

Annin & Co.

## FLOOR BRUSHES.

Associated Mfrs. Co.

## FLOOR DEAFENING.

Samuel Cabot.

## FORGES.

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## FUMIGATORS.

De Free Chemical Co.  
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Haney School Furniture Co.  
Peter & Volz Co.  
E. W. A. Rowles.  
Steel Furniture Co.  
N. J. School & Church Furn. Co.  
Heywood Bros. & Wakefield Co.  
Columbia School Supply Co.  
Empire Seating Co.  
N. Snellenburg & Co.  
GENERAL SCHOOL SUPPLIES.  
American Seating Co.  
E. W. A. Rowles.  
Peckham, Little & Co.  
Columbia School Supply Co.  
Thos. Charles Co.

## GLOBES.

Rand McNally & Co.  
E. W. A. Rowles.  
Peckham, Little & Co.  
McConnell School Supply Co.  
A. J. Nystrom & Co.

## GYMNASIUM APPARATUS.

Fred Medart Mfg. Co.  
W. S. Tothill.

## INK—DRY.

E. W. A. Rowles.  
Peckham, Little & Co.

## INK WELLS.

U. S. Inkwell Co.  
The Tannewitz Works.  
American Seating Co.  
E. W. A. Rowles.  
Squires Inkwell Co.

## JANITORS' SUPPLIES.

E. W. A. Rowles.  
Theo. B. Robertson Soap Co.  
Associated Mfrs. Co.

## KINDERGARTEN SUPPLIES.

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Thos. Charles Co.

## LABORATORY FURNITURE.

Grand Rapids School Equip. Co.  
Kewaunee Mfg. Co.  
Leonard Peterson & Co.  
Columbia School Supply Co.

## LABORATORY SHADE HOISTS.

Paltridge Metal Equipment Co.

## LATHES.

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E. H. Sheldon & Co.  
Crescent Machine Co.  
C. Christiansen.  
Tannewitz Works.  
Amer. Wood Work. Mach. Co.  
Grand Rapids School Equip. Co.

## LIBRARY SHELVING.

Durand Steel Locker Co.  
Paltridge Metal Equipment Co.

## LIQUID FLOOR HARDENER.

L. Sonneborn Sons.

## LIQUID SLATING.

N. Y. Silicate Book Slate Co.  
E. W. A. Rowles.  
Columbia School Supply Co.

## LIQUID SOAP.

American Sanitary Products Co.  
E. W. A. Rowles.  
West Disinfecting Company.  
Theo. B. Robertson Soap Co.  
Associated Mfrs. Co.

## LOCKERS.

Hess Warming & Ventilating Co.  
Durand Steel Locker Co.  
Federal Steel Fixture Co.  
Fred Medart Mfg. Co.  
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## MACHINERY.

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Crescent Machine Co.  
Amer. Wood Work. Mach. Co.  
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Theo. B. Robertson Soap Co.  
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## PENCIL SHARPENERS.

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Automatic Pencil Sharpener Co.

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## PICTURES.

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## PLAYGROUND APPARATUS.

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Rundle-Spence Mfg. Co.  
N. O. Nelson Mfg. Co.

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American Portable House Co.  
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Excelsior Stove & Mfg. Co.  
Peter & Volz.

## SCHOOL WAGONS.

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## STATUARY.

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## SWEEEPING COMPOUNDS.

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West Disinfecting Co.  
Associated Mfrs. Co.

## TALKING MACHINES.

Victor Talking Machine Co.

## TEACHERS' INSURANCE.

Teachers' Casualty Underwriters.

## TELEPHONES.

Western Electric Co.  
Swedish-American Tel. Mfg. Co.

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E. W. A. Rowles.  
Peckham, Little & Co.  
Theo. B. Robertson Soap Co.  
West Disinfecting Co.  
Associated Mfrs. Co.

## TOILET PAPER FIXTURES.

Associated Mfrs. Co.

## TOWEL FIXTURES.

Associated Mfrs. Co.

## TOWER CLOCKS.

Stand. Electric Time Co.

## TYPEWRITERS.

Remington Typewriter Co.

## VACUUM CLEANING SYSTEMS.

Spencer Turbine Cleaner Co.  
United Electric Co.  
Western Electric Co.

## VIBES.

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C. Christiansen.  
Tannewitz Works.  
A. L. Bemis.  
Grand Rapids Hand Screw Co.

## WALL BURLAPS.

Cott-a-Lap Co.

## WALL DEAFENING.

Samuel Cabot.

## WALL PAINTS.

Patek Bros.

## WASTE PAPER BASKETS.

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Henry Wells Cornice Co.  
Detroit Steel Products Co.

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Crescent Machine Co.  
Tannewitz Works.  
American Wood Work. Mach. Co.  
Grand Rapids School Equip. Co.

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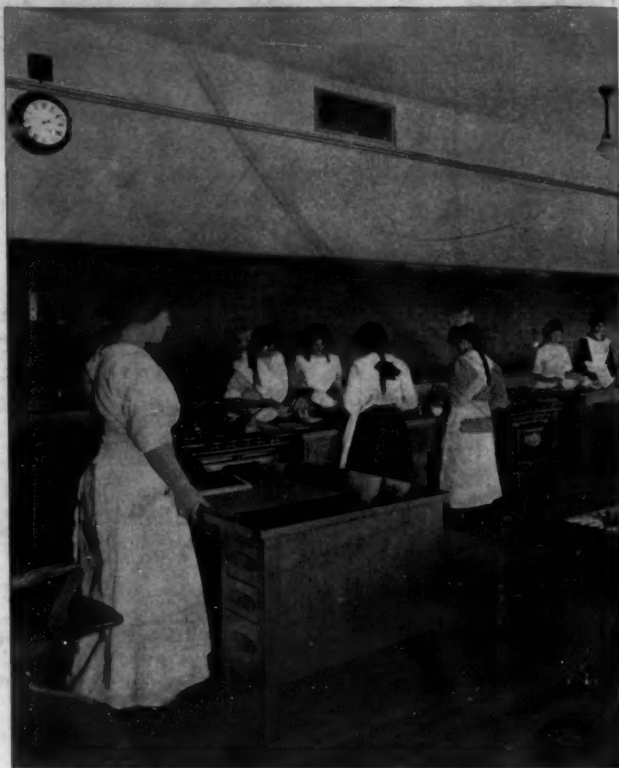
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